

TPS7A4501-SP (5962-1222402VHA) Neutron Displacement Damage Characterization



ABSTRACT

This report presents the effect of neutron displacement damage (NDD) on the TPS7A4501-SP device. The results show that all devices were fully functional and within production test limits after having been irradiated up to 1×10^{13} n/cm² (1 MeV equivalent). A sample size of twenty units was exposed to radiation testing per (MIL-STD-883, Method 1017 for Neutron Irradiation) and an additional unirradiated sample device was used for correlation. All devices used in the experiment were from lot date code 1348A and assembly lot 3016157MMT. Electrical testing was performed at Texas Instruments before and after neutron irradiation using the production test program for 5962-1222402VHA.

For questions or comments please contact hirelmarketing@list.ti.com.

Table of Contents

1 Overview.....	2
2 Test Procedures.....	3
3 Facility.....	4
4 Results.....	4
5 Revision History.....	4
A Full Test Results.....	5
B TPS7A4501-SP NDD Test Results.....	7

List of Figures

Figure 2-1. TPS7A4501-SP Device.....	3
--------------------------------------	---

List of Tables

Table 1-1. Overview Information.....	2
Table 2-1. Neutron Irradiation Conditions.....	3
Table A-1. TPS7A4501-SP Specification Compliance Matrix ⁽¹⁾⁽²⁾⁽³⁾	5

Trademarks

All trademarks are the property of their respective owners.

1 Overview

The TPS7A4501-SP is a low-dropout (LDO) regulator optimized for fast-transient response. The 5962-1222402VHA can supply 1.5 A of output current with a dropout voltage of 320 mV. Quiescent current is well controlled; it does not rise in dropout, as with many other regulators. In addition to fast transient response, the TPS7A4501-SP regulator has very-low output noise, which makes it ideal for sensitive RF-supply applications.

General device information and testing conditions are listed in [Table 1-1](#).

Table 1-1. Overview Information

Overview Information	
TI Part Number	TPS7A4501-SP
SMD Number	5962-12224
Device Function	Low Dropout Voltage Regulator
Die Name	STLADJC1963DPS
Technology	J11
A/T Lot Number / Date Code	3016157MMT / 1348A
Biased Quantity Tested	0
Unbiased Quantity Tested	20
Exposure Facility	White Sands Missile Range
Neutron Fluence (1 MeV equivalent)	6.0×10^{11} , 1.2×10^{12} , 5.0×10^{12} , 1.0×10^{13} n/cm ²
Irradiation Temperature	25°C
TI may provide technical, applications or design advice, quality characterization, and reliability data or service providing these items shall not expand or otherwise affect TI's warranties as set forth in the Texas Instruments Incorporated Standard Terms and Conditions of Sale for Semiconductor Products and no obligation or liability shall arise from Semiconductor Products and no obligation or liability shall arise from TI's provision of such items.	

2 Test Procedures

The TPS7A4501-SP was electrically pre-tested using the production automated test equipment program. General test procedures were IAW MIL-STD-883, Method 1017 for Neutron Irradiation of TPS7A4501-SP as modified in [Table 2-1](#).

Table 2-1. Neutron Irradiation Conditions

Group	Sample Qty	Neutron Fluence (n/cm ²)	Bias
A	5	6.0×10^{11}	Unbiased
B	5	1.2×10^{12}	Unbiased
C	5	5.0×10^{12}	Unbiased
D	5	1.0×10^{13}	Unbiased



Figure 2-1. TPS7A4501-SP Device

3 Facility

The White Sands Missile Range *Fast Burst Reactor* (FBR) is an unmoderated, unreflected bare critical assembly of the Godiva II type. The FBR is extensively used for producing a nuclear environment which stimulates the neutron portion of a nuclear weapon. Military systems are exposed to this environment for testing and analysis of their response to a nuclear weapon. The primary system degradation at the FBR is produced by neutron interactions within the system. Most of the military systems tested use solid-state electronic devices. Neutron displacement and other neutron effects in the silicon devices cause the electronic degradation. The amount of damage produced by a neutron is a function of the neutron energy. The neutrons produced by the FBR have a continuous (fission) spectrum of energies. A complete characterization of this spectrum is essential in the evaluation of the nuclear effects on the system under evaluation. The fluences are calculated based on 1-MeV equivalences.

The following link is to an additional paper that discusses questions concerning spectrum and dosimetry:
<http://oai.dtic.mil/oai/oai?verb=getRecord&metadataPrefix=html&identifier=ADA026167>

4 Results

There were no functional failures at any irradiation level. All parametric measurements remained well within all datasheet (SLVSC31) limits for all exposure levels. All parametric measurements remained well within the production test limits which are guard-banded from the datasheet limits. The following list is an overview of the largest drifts seen post-test. The full parameter list and graphs are found in [Appendix A](#).

The largest shifts seen for various parameters are shown in the following list:

1. 600.3__Line Reg BW 2p9-20V_1mA. Pre readings approximately 0.015 mV, Post approximately 0.25 mV, Change approximately 1000%. This accounts for < 10% shift of Fail Limit Range.
2. 1600.0__Iquies. Pre readings approximately 0.005 μ A, Post readings approximately 0.19 μ A, Change approximately 4000%. This accounts for < 2% shift of Fail Limit Range.
3. 2700.1__OUPUT-to-ADJ Short. Pre readings approximately -0.03 nA, Post readings approximately 0.001 nA, Change approximately 98%. This accounts for < 1% of Fail Limit Range.

The *Fail Limit* range is a guard-banded limit that Texas Instruments puts into test programs to insure device performance. It is always set within the datasheet limits to insure the device meets all datasheet parameters.

5 Revision History

NOTE: Page numbers for previous revisions may differ from page numbers in the current version.

Changes from Revision * (February 2017) to Revision A (June 2021)	Page
• Updated the numbering format for tables, figures, and cross-references throughout the document.....	1
• Updated device name to 5962-1222402VHA.....	1

A Full Test Results

Table A-1 lists the full TPS7A4501-SP specification compliance matrix.

Table A-1. TPS7A4501-SP Specification Compliance Matrix⁽¹⁾⁽²⁾⁽³⁾

Electrical Characteristics								
Parameter	Test Condition	Data Sheet (SLVSC31)					FINAL Test Condition	FT Tests Covered
		MAX	MIN	TYP	MAX	UNIT		
Minimum Voltage Input (V _{IN})	I _{LOAD} = 1.5 A	Full range		2.1	2.9	V		X
ADJ pin voltage (V _{ADJ})	V _{IN} = 2.9 V to 20 V, I _{LOAD} = 1 mA to 1.5 A	Full range	1.174	1.21	1.246	V	V _{IN} = 2.9 V, I _{LOAD} = 1 mA	X
							V _{IN} = 2.9 V, I _{LOAD} = 1.5 A	
							20 V I _{LOAD} = 1 mA	
Line regulation ⁽⁴⁾	ΔV _{IN} = 2.9 V to 20 V, I _{LOAD} = 1 mA	Full range		1.5	6.5	V	2p9-20V_1mA	X
Load regulation	V _{IN} = 2.9 V, ΔI _{LOAD} = 1 mA to 1.5 A	25°C		2	10	mV		X
	V _{IN} = 2.9 V, ΔI _{LOAD} = 1 mA to 1.5 A	Full range			18	mV		
Dropout Voltage (V _{DO}) at V _{OUT} = 2.4 V ^{(5) (6)}	I _{LOAD} = 1 mA	25°C		0.02	0.05	V	I _{LOAD} = 1 mA, V _{IN} = 2.4V	X
		Full range			0.07	V		
	I _{LOAD} = 100 mA	25°C		0.085	0.1	V	I _{LOAD} = 100 mA, V _{IN} = 2.4V	X
		Full range			0.13	V		
	I _{LOAD} = 500 mA	25°C		0.17	0.21	V	I _{LOAD} = 500 mA, V _{IN} = 2.4V	X
		Full range			0.27	V		
	I _{LOAD} = 750 mA	25°C		0.3	0.27	V	I _{LOAD} = 750 mA, V _{IN} = 2.4V	X
		Full range			0.33	V		
	I _{LOAD} = 1 A	25°C		0.3	0.32	V	I _{LOAD} = 1 A, V _{IN} = 2.4V	X
		Full range			0.35	V		
	I _{LOAD} = 1.25 A	25°C		0.3	0.4	V	I _{LOAD} = 1.25 A, V _{IN} = 2.4V	X
		Full range			0.5	V		
	I _{LOAD} = 1.5 A	25°C		0.3	0.5	V	I _{LOAD} = 1.5 A, V _{IN} = 2.4V	X
		Full range			0.75	V		
Dropout Voltage (V _{DO}) at V _{OUT} = 19.3 V ^{(5) (7)}	I _{LOAD} = 1 mA	25°C		0.08	0.32	V	I _{LOAD} = 1 mA, V _{IN} = 19.3 V	X
		Full range			0.4	V		
	I _{LOAD} = 100 mA	25°C		0.14	0.4	V	I _{LOAD} = 100 mA, V _{IN} = 19.3 V	X
		Full range			0.58	V		
Dropout Voltage (V _{DO}) at V _{OUT} = 19.3 V ^{(5) (7)}	I _{LOAD} = 500 mA	25°C		0.25	0.4	V	I _{LOAD} = 500 mA, V _{IN} = 19.3 V	X
		Full range			0.6	V		
	I _{LOAD} = 750 mA	25°C		0.3	0.4	V	I _{LOAD} = 750 mA, V _{IN} = 19.3 V	X
		Full range			0.62	V		
	I _{LOAD} = 1 A	25°C		0.34	0.45	V	I _{LOAD} = 1 A, V _{IN} = 19.3 V	X
		Full range			0.65	V		
	I _{LOAD} = 1.25 A	25°C		0.4	0.5	V	I _{LOAD} = 1.25 A, V _{IN} = 19.3 V	X
		Full range			0.68	V		
	I _{LOAD} = 1.5 A	25°C		0.45	0.6	V	I _{LOAD} = 1.5 A, V _{IN} = 19.3 V	X
		Full range			0.75	V		
GND pin current (I _{GND}) V _{IN} = 2.9 V	I _{LOAD} = 0 mA	Full range		1	1.5	mA	I _{LOAD} = 0 mA	X
	I _{LOAD} = 1 mA	Full range		1.1	1.6	mA	I _{LOAD} = 1 mA	X
	I _{LOAD} = 100 mA	Full range		3.3	7	mA	I _{LOAD} = 100 mA	X
	I _{LOAD} = 500 mA	Full range		8.5	30	mA	I _{LOAD} = 500 mA	X
	I _{LOAD} = 750 mA	Full range		15	45	mA	I _{LOAD} = 750 mA	X
	I _{LOAD} = 1.0 A	Full range		25	50	mA	I _{LOAD} = 1.0 A	X
	I _{LOAD} = 1.25 A	Full range		36	80	mA	I _{LOAD} = 1.25 A	X
I _{LOAD} = 1.5 A	Full range		53	105	mA	I _{LOAD} = 1.5 A	X	
Output voltage noise (eN)	C _{OUT} = 10 μF, I _{LOAD} = 1.5 A, BW = 10 Hz to 100 kHz (E _N), V _{IN} = 5.5 V, V _{OUT} = 5 V	25°C		50		μVRMS		X
ADJ pin bias current (I _{ADJ})		25°C		3	7	μA		X
		Full range		5.5	15	μA		X

Table A-1. TPS7A4501-SP Specification Compliance Matrix⁽¹⁾⁽²⁾⁽³⁾ (continued)

Electrical Characteristics								
Parameter	Test Condition	Data Sheet (SLVSC31)						FT Tests Covered
		MAX	MIN	TYP	MAX	UNIT	FINAL Test Condition	
Shutdown threshold	$V_{OUT} = \text{OFF to ON}$	Full range		0.9	2	V		X
	$V_{OUT} = \text{ON to OFF}$	Full range	0.15	0.75		V		X
SHDN pin current (ISHDN)	$V_{SHDN} = 0 \text{ V}$	Full range		0.01	1	μA		X
	$V_{SHDN} = 20 \text{ V}$	Full range		3	20	μA		X
Quiescent current in shutdown	$V_{IN} = 6 \text{ V}, V_{SHDN} = 0 \text{ V}$	Full range		5	10	μA		X
Ripple rejection	$V_{IN} - V_{OUT} = 1.5 \text{ V (avg)}$, $V_{RIPPLE} = 0.5 \text{ VP-P}$, $f_{RIPPLE} = 120 \text{ Hz}, I_{LOAD} = 0.75 \text{ A}$	25°C	60	68		dB	$I_{LOAD} = 750 \text{ mA}$	X
	$V_{IN} - V_{OUT} = 1.5 \text{ V (avg)}$, $V_{RIPPLE} = 0.5 \text{ VP-P}$, $f_{RIPPLE} = 120 \text{ Hz}, I_{LOAD} = 0.75 \text{ A}$	Full range	58	63		dB	$I_{LOAD} = 750 \text{ mA}$	X
	$V_{IN} - V_{OUT} = 1.5 \text{ V (avg)}$, $V_{RIPPLE} = 0.5 \text{ VP-P}$, $f_{RIPPLE} = 120 \text{ Hz}, I_{LOAD} = 1.5 \text{ A}$	25°C	50	60		dB	$I_{LOAD} = 1.5 \text{ A}$	X
	$V_{IN} - V_{OUT} = 1.5 \text{ V (avg)}$, $V_{RIPPLE} = 0.5 \text{ VP-P}$, $f_{RIPPLE} = 120 \text{ Hz}, I_{LOAD} = 1.5 \text{ A}$	Full range	44	52		dB	$I_{LOAD} = 1.5 \text{ A}$	X
Current limit (ILIMIT)	$V_{IN} = 7 \text{ V}, V_{OUT} = 0 \text{ V}$	Full range	1.7	1.9		A	$V_{IN} = 7 \text{ V}$	X
	$V_{IN} = 2.9 \text{ V}$	Full range	1.6	1.9		A	$V_{IN} = 2.9 \text{ V}$	X
Input reverse leakage current (IIL)	$V_{IN} = -20 \text{ V}, V_{OUT} = 0 \text{ V}$	Full range			300	μA		
Reverse output current (IRO)	$V_{OUT} = 1.21 \text{ V}, V_{IN} < 1.21 \text{ V}$	Full range		300	500	μA		X
Parameters for BI Delta	Delta Limits Min	Delta Limits Max	Units					
ADJ pin voltage	-0.012	0.012	V					
Line Regulation	-0.24	0.24	mV					

- (1) Typical values represent the likely parametric nominal values determined at the time of characterization. Typical values depend on the application and configuration and may vary over time. Typical values are not ensured on production material.
- (2) The TPS7A4501-SP is tested and specified for these conditions with the ADJ pin connected to the OUT pin.
- (3) Dropout voltages are limited by the minimum input voltage specification under some output voltage/load conditions.
- (4) Operating conditions are limited by maximum junction temperature. The regulated output voltage specification does not apply for all possible combinations of input voltage and output current. When operating at maximum input voltage, limit the output current range. When operating at maximum output current, limit the input voltage range.
- (5) Dropout voltage is the minimum input to output voltage differential needed to maintain regulation at a specified output current. In dropout, the output voltage is equal to: $V_{IN} - V_{DROPOUT}$.
- (6) To satisfy requirements for minimum input voltage, the TPS7A4501-SP is tested and specified for these conditions with an external resistor divider (two 4.12-k Ω resistors) for an output voltage of 2.4 V. The external resistor divider adds a 300- μA DC load on the output.
- (7) To satisfy requirements for minimum input voltage, the TPS7A4501-SP is tested and specified for these conditions with an external resistor divider (one 4.12-k Ω resistor and one 61.9 k Ω) for an output voltage of 19.3 V. The external resistor divider adds a 300- μA DC load on the output.

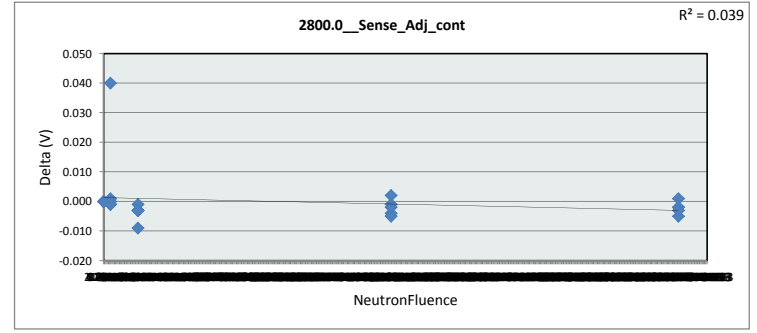
B TPS7A4501-SP NDD Test Results

This section contains the TPS7A4501-SP NDD test results.

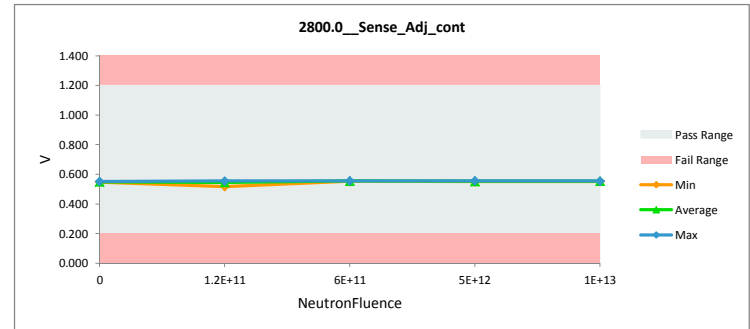
NDD Report
Device Name TPS7A4501

2800.0_Sense_Adj_cont		
Test Site		
Tester		
Test Number		
Unit	V	V
Max Limit	1.2	1.2
Min Limit	0.2	0.2

NeutronFluence	Serial #	01152015_pre.txt	01112015_post.txt	Delta	Delta %	% of Limit Range
0	127	0.549	0.549	0.000	0.00%	0.00%
0	128	0.548	0.548	0.000	0.00%	0.00%
0	129	0.552	0.552	0.000	0.00%	0.00%
0	130	0.550	0.550	0.000	0.00%	0.00%
1.2E+11	131	0.552	0.551	0.001	0.18%	0.10%
1.2E+11	132	0.557	0.517	0.040	7.18%	4.00%
1.2E+11	133	0.552	0.553	-0.001	-0.18%	0.10%
1.2E+11	134	0.552	0.552	0.000	0.00%	0.00%
1.2E+11	135	0.554	0.555	-0.001	-0.18%	0.10%
6E+11	136	0.552	0.553	-0.001	-0.18%	0.10%
6E+11	137	0.545	0.554	-0.009	-1.65%	0.90%
6E+11	138	0.553	0.556	-0.003	-0.54%	0.30%
6E+11	139	0.551	0.554	-0.003	-0.54%	0.30%
6E+11	140	0.553	0.556	-0.003	-0.54%	0.30%
5E+12	141	0.551	0.552	-0.001	-0.18%	0.10%
0	142	0.552	0.552	0.000	0.00%	0.00%
5E+12	143	0.550	0.554	-0.004	-0.73%	0.40%
5E+12	144	0.551	0.556	-0.005	-0.91%	0.50%
5E+12	145	0.551	0.553	-0.002	-0.36%	0.20%
5E+12	146	0.553	0.551	0.002	0.36%	0.20%
1E+13	147	0.553	0.552	0.001	0.18%	0.10%
1E+13	148	0.550	0.552	-0.002	-0.36%	0.20%
1E+13	149	0.552	0.554	-0.002	-0.36%	0.20%
1E+13	150	0.550	0.555	-0.005	-0.91%	0.50%
1E+13	151	0.552	0.555	-0.003	-0.54%	0.30%
Max		0.557	0.556	0.040	7.18%	4.00%
Average		0.551	0.551	0.000	-0.01%	0.36%
Min		0.545	0.517	-0.009	-1.65%	0.00%
Std Dev		0.002	0.007	0.009	1.56%	0.79%



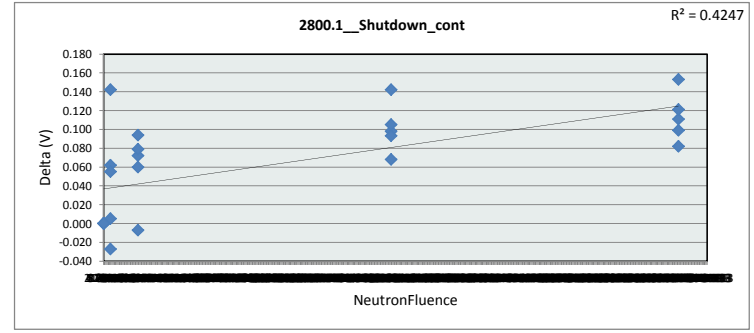
2800.0_Sense_Adj_cont					
Test Site					
Tester					
Test Number					
Max Limit	1.2	V			
Min Limit	0.2	V			
NeutronFluence	0	1.2E+11	6E+11	5E+12	1E+13
LL	0.200	0.200	0.200	0.200	0.200
Min	0.548	0.517	0.553	0.551	0.552
Average	0.550	0.546	0.555	0.553	0.554
Max	0.552	0.555	0.556	0.556	0.555
UL	1.200	1.200	1.200	1.200	1.200



NDD Report
Device Name TPS7A4501

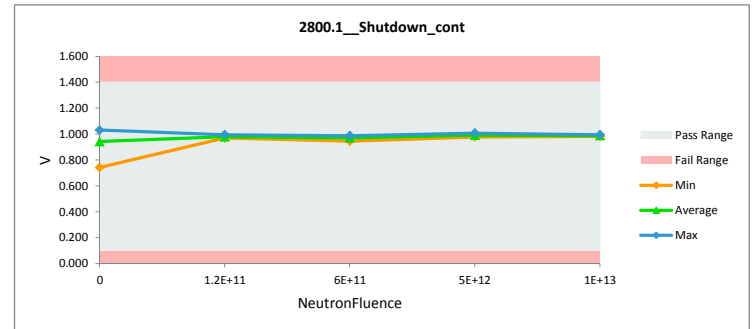
2800.1_Shutdown_cont	
Test Site	
Tester	
Test Number	
Unit	V V
Max Limit	1.4 1.4
Min Limit	0.1 0.1

NeutronFluence	Serial #	01152015_pre.txt	01112015_post.txt	Delta	Delta %	% of Limit Range
0	127	0.976	0.976	0.000	0.00%	0.00%
0	128	0.997	0.997	0.000	0.00%	0.00%
0	129	1.031	1.031	0.000	0.00%	0.00%
0	130	0.961	0.961	0.000	0.00%	0.00%
1.2E+11	131	1.137	0.995	0.142	12.49%	10.92%
1.2E+11	132	0.954	0.981	-0.027	-2.83%	2.08%
1.2E+11	133	0.977	0.972	0.005	0.51%	0.38%
1.2E+11	134	1.032	0.970	0.062	6.01%	4.77%
1.2E+11	135	1.034	0.979	0.055	5.32%	4.23%
6E+11	136	1.046	0.974	0.072	6.88%	5.54%
6E+11	137	0.954	0.961	-0.007	-0.73%	0.54%
6E+11	138	1.041	0.981	0.060	5.76%	4.62%
6E+11	139	1.066	0.987	0.079	7.41%	6.08%
6E+11	140	1.040	0.946	0.094	9.04%	7.23%
5E+12	141	1.079	0.981	0.098	9.08%	7.54%
0	142	0.742	0.742	0.000	0.00%	0.00%
5E+12	143	1.075	1.007	0.068	6.33%	5.23%
5E+12	144	1.120	0.978	0.142	12.68%	10.92%
5E+12	145	1.096	1.003	0.093	8.49%	7.15%
5E+12	146	1.092	0.987	0.105	9.62%	8.08%
1E+13	147	1.099	0.988	0.111	10.10%	8.54%
1E+13	148	1.067	0.985	0.082	7.69%	6.31%
1E+13	149	1.082	0.983	0.099	9.15%	7.62%
1E+13	150	1.106	0.985	0.121	10.94%	9.31%
1E+13	151	1.148	0.995	0.153	13.33%	11.77%
Max		1.148	1.031	0.153	13.33%	11.77%
Average		1.038	0.974	0.064	5.89%	5.15%
Min		0.742	0.742	-0.027	-2.83%	0.00%
Std Dev		0.083	0.051	0.054	4.87%	3.86%



2800.1_Shutdown_cont	
Test Site	
Tester	
Test Number	
Max Limit	1.4 V
Min Limit	0.1 V

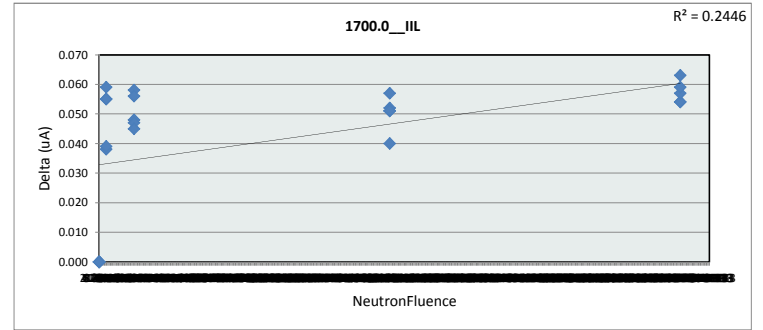
NeutronFluence	0	1.2E+11	6E+11	5E+12	1E+13
LL	0.100	0.100	0.100	0.100	0.100
Min	0.742	0.970	0.946	0.978	0.983
Average	0.941	0.979	0.970	0.991	0.987
Max	1.031	0.995	0.987	1.007	0.995
UL	1.400	1.400	1.400	1.400	1.400



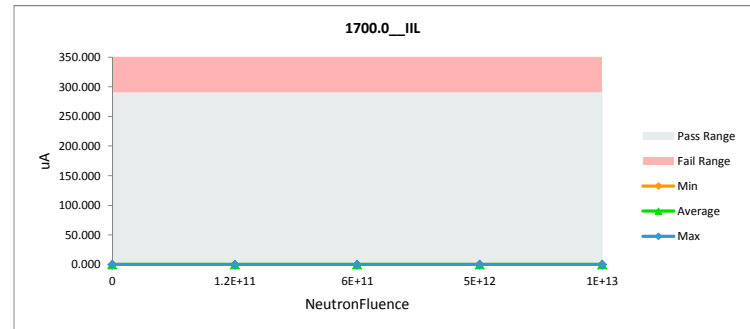
NDD Report
Device Name TPS7A4501

Test Site	1700.0_IIL	
Tester		
Test Number		
Unit	uA	uA
Max Limit	290	290
Min Limit	0	0

NeutronFluence	Serial #	01152015_pre.txt	01112015_post.txt	Delta	Delta %	% of Limit Range
0	127	0.110	0.110	0.000	0.00%	0.00%
0	128	0.107	0.107	0.000	0.00%	0.00%
0	129	0.107	0.107	0.000	0.00%	0.00%
0	130	0.114	0.114	0.000	0.00%	0.00%
1.2E+11	131	0.103	0.048	0.055	53.40%	0.02%
1.2E+11	132	0.105	0.067	0.038	36.19%	0.01%
1.2E+11	133	0.108	0.049	0.059	54.63%	0.02%
1.2E+11	134	0.104	0.065	0.039	37.50%	0.01%
1.2E+11	135	0.105	0.050	0.055	52.38%	0.02%
6E+11	136	0.107	0.049	0.058	54.21%	0.02%
6E+11	137	0.101	0.053	0.048	47.52%	0.02%
6E+11	138	0.110	0.054	0.056	50.91%	0.02%
6E+11	139	0.103	0.056	0.047	45.63%	0.02%
6E+11	140	0.105	0.060	0.045	42.86%	0.02%
5E+12	141	0.105	0.053	0.052	49.52%	0.02%
0	142	0.106	0.106	0.000	0.00%	0.00%
5E+12	143	0.106	0.049	0.057	53.77%	0.02%
5E+12	144	0.101	0.050	0.051	50.50%	0.02%
5E+12	145	0.104	0.053	0.051	49.04%	0.02%
5E+12	146	0.100	0.060	0.040	40.00%	0.01%
1E+13	147	0.107	0.053	0.054	50.47%	0.02%
1E+13	148	0.107	0.044	0.063	58.88%	0.02%
1E+13	149	0.103	0.049	0.054	52.43%	0.02%
1E+13	150	0.104	0.047	0.057	54.81%	0.02%
1E+13	151	0.109	0.050	0.059	54.13%	0.02%
Max		0.114	0.114	0.063	58.88%	0.02%
Average		0.106	0.064	0.042	39.55%	0.01%
Min		0.100	0.044	0.000	0.00%	0.00%
Std Dev		0.003	0.023	0.022	20.91%	0.01%



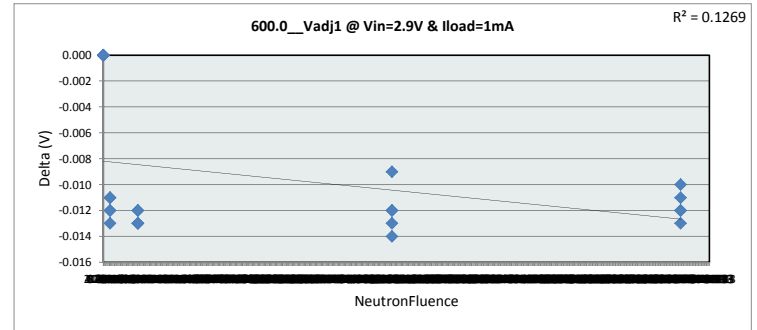
Test Site	1700.0_IIL				
Tester					
Test Number					
Max Limit	290	uA			
Min Limit	0	uA			
NeutronFluence	0	1.2E+11	6E+11	5E+12	1E+13
LL	0.000	0.000	0.000	0.000	0.000
Min	0.106	0.048	0.049	0.049	0.044
Average	0.109	0.056	0.054	0.053	0.049
Max	0.114	0.067	0.060	0.060	0.053
UL	290.000	290.000	290.000	290.000	290.000



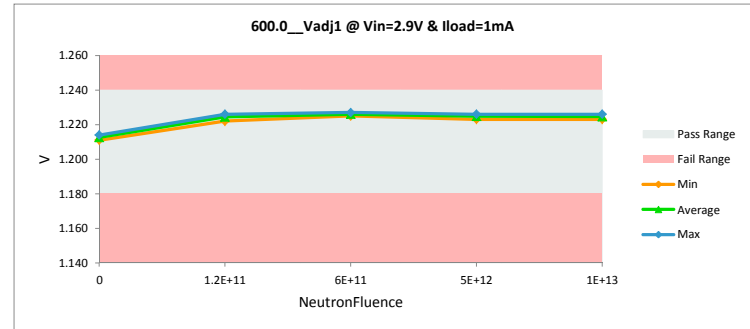
NDD Report
Device Name TPS7A4501

600.0_Vadj1 @ Vin=2.9V & Iload	
Test Site	
Tester	
Test Number	
Unit	V V
Max Limit	1.24 1.24
Min Limit	1.18 1.18

NeutronFluence	Serial #	01152015_pre.txt	01112015_post.txt	Delta	Delta %	% of Limit Range
0	127	1.214	1.214	0.000	0.00%	0.00%
0	128	1.212	1.212	0.000	0.00%	0.00%
0	129	1.211	1.211	0.000	0.00%	0.00%
0	130	1.214	1.214	0.000	0.00%	0.00%
1.2E+11	131	1.212	1.223	-0.011	-0.91%	18.33%
1.2E+11	132	1.214	1.226	-0.012	-0.99%	20.00%
1.2E+11	133	1.213	1.225	-0.012	-0.99%	20.00%
1.2E+11	134	1.211	1.222	-0.011	-0.91%	18.33%
1.2E+11	135	1.213	1.226	-0.013	-1.07%	21.67%
6E+11	136	1.213	1.225	-0.012	-0.99%	20.00%
6E+11	137	1.212	1.225	-0.013	-1.07%	21.67%
6E+11	138	1.213	1.226	-0.013	-1.07%	21.67%
6E+11	139	1.214	1.227	-0.013	-1.07%	21.67%
6E+11	140	1.215	1.227	-0.012	-0.99%	20.00%
5E+12	141	1.212	1.225	-0.013	-1.07%	21.67%
0	142	1.212	1.212	0.000	0.00%	0.00%
5E+12	143	1.214	1.223	-0.009	-0.74%	15.00%
5E+12	144	1.212	1.226	-0.014	-1.16%	23.33%
5E+12	145	1.213	1.225	-0.012	-0.99%	20.00%
5E+12	146	1.213	1.225	-0.012	-0.99%	20.00%
1E+13	147	1.213	1.224	-0.011	-0.91%	18.33%
1E+13	148	1.212	1.224	-0.012	-0.99%	20.00%
1E+13	149	1.214	1.226	-0.012	-0.99%	20.00%
1E+13	150	1.213	1.226	-0.013	-1.07%	21.67%
1E+13	151	1.213	1.223	-0.010	-0.82%	16.67%
Max		1.215	1.227	0.000	0.00%	23.33%
Average		1.213	1.222	-0.010	-0.79%	16.00%
Min		1.211	1.211	-0.014	-1.16%	0.00%
Std Dev		0.001	0.005	0.005	0.41%	8.35%



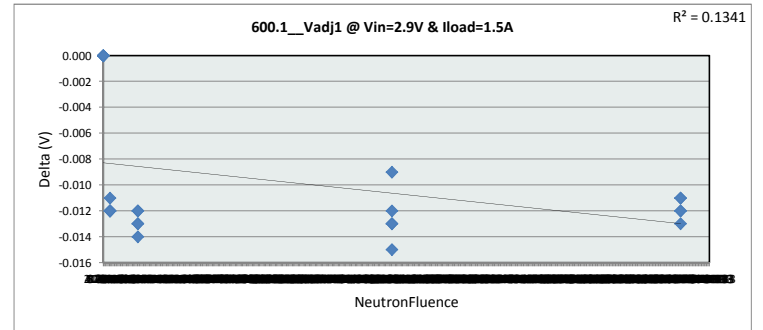
600.0_Vadj1 @ Vin=2.9V		0	1.2E+11	6E+11	5E+12	1E+13
Test Site						
Tester						
Test Number						
Max Limit	1.24	V				
Min Limit	1.18	V				
LL		1.180	1.180	1.180	1.180	1.180
Min		1.211	1.222	1.225	1.223	1.223
Average		1.213	1.224	1.226	1.225	1.225
Max		1.214	1.226	1.227	1.226	1.226
UL		1.240	1.240	1.240	1.240	1.240



NDD Report
Device Name TPS7A4501

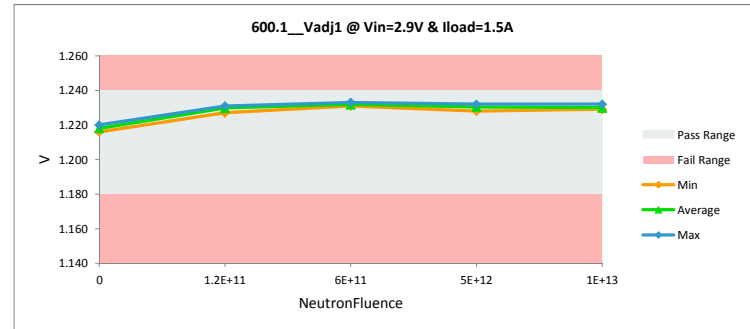
600.1_Vadj1 @ Vin=2.9V & Iload	
Test Site	
Tester	
Test Number	
Unit	V V
Max Limit	1.24 1.24
Min Limit	1.18 1.18

NeutronFluence	Serial #	01152015_pre.txt	01112015_post.txt	Delta	Delta %	% of Limit Range
0	127	1.219	1.219	0.000	0.00%	0.00%
0	128	1.217	1.217	0.000	0.00%	0.00%
0	129	1.216	1.216	0.000	0.00%	0.00%
0	130	1.220	1.220	0.000	0.00%	0.00%
1.2E+11	131	1.217	1.229	-0.012	-0.99%	20.00%
1.2E+11	132	1.219	1.231	-0.012	-0.98%	20.00%
1.2E+11	133	1.219	1.231	-0.012	-0.98%	20.00%
1.2E+11	134	1.216	1.227	-0.011	-0.90%	18.33%
1.2E+11	135	1.219	1.231	-0.012	-0.98%	20.00%
6E+11	136	1.219	1.231	-0.012	-0.98%	20.00%
6E+11	137	1.218	1.231	-0.013	-1.07%	21.67%
6E+11	138	1.218	1.232	-0.014	-1.15%	23.33%
6E+11	139	1.220	1.232	-0.012	-0.98%	20.00%
6E+11	140	1.220	1.233	-0.013	-1.07%	21.67%
5E+12	141	1.217	1.230	-0.013	-1.07%	21.67%
0	142	1.218	1.218	0.000	0.00%	0.00%
5E+12	143	1.219	1.228	-0.009	-0.74%	15.00%
5E+12	144	1.217	1.232	-0.015	-1.23%	25.00%
5E+12	145	1.218	1.231	-0.013	-1.07%	21.67%
5E+12	146	1.219	1.231	-0.012	-0.98%	20.00%
1E+13	147	1.218	1.229	-0.011	-0.90%	18.33%
1E+13	148	1.217	1.229	-0.012	-0.99%	20.00%
1E+13	149	1.219	1.232	-0.013	-1.07%	21.67%
1E+13	150	1.219	1.231	-0.012	-0.98%	20.00%
1E+13	151	1.218	1.229	-0.011	-0.90%	18.33%
Max		1.220	1.233	0.000	0.00%	25.00%
Average		1.218	1.228	-0.010	-0.80%	16.27%
Min		1.216	1.216	-0.015	-1.23%	0.00%
Std Dev		0.001	0.005	0.005	0.42%	8.50%



600.1_Vadj1 @ Vin=2.9V	
Test Site	
Tester	
Test Number	
Max Limit	1.24 V
Min Limit	1.18 V

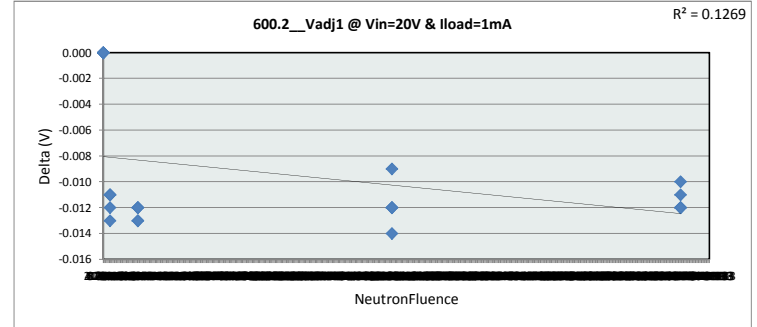
NeutronFluence	0	1.2E+11	6E+11	5E+12	1E+13
LL	1.180	1.180	1.180	1.180	1.180
Min	1.216	1.227	1.231	1.228	1.229
Average	1.218	1.230	1.232	1.230	1.230
Max	1.220	1.231	1.233	1.232	1.232
UL	1.240	1.240	1.240	1.240	1.240



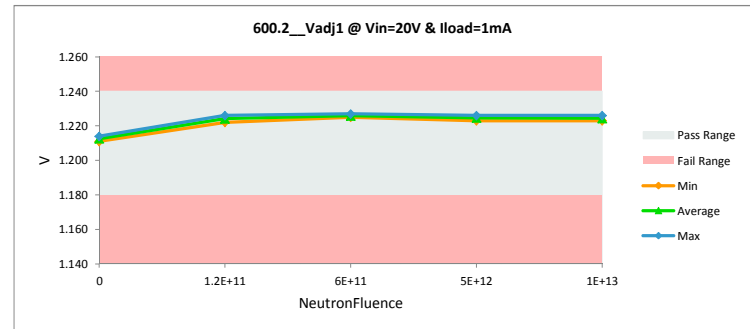
NDD Report
Device Name TPS7A4501

600.2_Vadj1 @ Vin=20V & Iload	
Test Site	
Tester	
Test Number	
Unit	V V
Max Limit	1.24 1.24
Min Limit	1.18 1.18

NeutronFluence	Serial #	01152015_pre.txt	01112015_post.txt	Delta	Delta %	% of Limit Range
0	127	1.214	1.214	0.000	0.00%	0.00%
0	128	1.212	1.212	0.000	0.00%	0.00%
0	129	1.211	1.211	0.000	0.00%	0.00%
0	130	1.214	1.214	0.000	0.00%	0.00%
1.2E+11	131	1.212	1.223	-0.011	-0.91%	18.33%
1.2E+11	132	1.214	1.225	-0.011	-0.91%	18.33%
1.2E+11	133	1.213	1.225	-0.012	-0.99%	20.00%
1.2E+11	134	1.211	1.222	-0.011	-0.91%	18.33%
1.2E+11	135	1.213	1.226	-0.013	-1.07%	21.67%
6E+11	136	1.213	1.225	-0.012	-0.99%	20.00%
6E+11	137	1.212	1.225	-0.013	-1.07%	21.67%
6E+11	138	1.213	1.226	-0.013	-1.07%	21.67%
6E+11	139	1.214	1.226	-0.012	-0.99%	20.00%
6E+11	140	1.215	1.227	-0.012	-0.99%	20.00%
5E+12	141	1.212	1.224	-0.012	-0.99%	20.00%
0	142	1.212	1.212	0.000	0.00%	0.00%
5E+12	143	1.214	1.223	-0.009	-0.74%	15.00%
5E+12	144	1.212	1.226	-0.014	-1.16%	23.33%
5E+12	145	1.213	1.225	-0.012	-0.99%	20.00%
5E+12	146	1.213	1.225	-0.012	-0.99%	20.00%
1E+13	147	1.213	1.224	-0.011	-0.91%	18.33%
1E+13	148	1.212	1.224	-0.012	-0.99%	20.00%
1E+13	149	1.214	1.226	-0.012	-0.99%	20.00%
1E+13	150	1.213	1.225	-0.012	-0.99%	20.00%
1E+13	151	1.213	1.223	-0.010	-0.82%	16.67%
Max		1.215	1.227	0.000	0.00%	23.33%
Average		1.213	1.222	-0.009	-0.78%	15.73%
Min		1.211	1.211	-0.014	-1.16%	0.00%
Std Dev		0.001	0.005	0.005	0.41%	8.19%



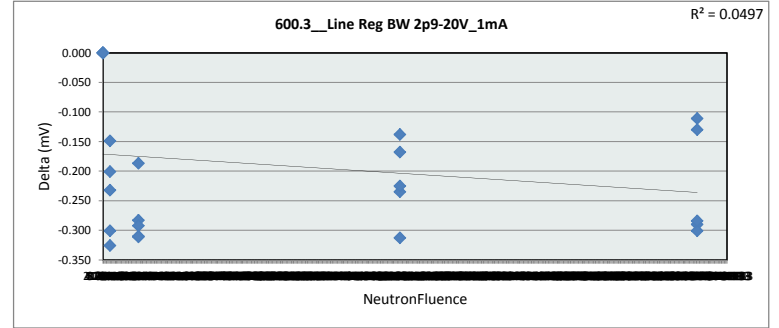
600.2_Vadj1 @ Vin=20V & Iload=1mA		0	1.2E+11	6E+11	5E+12	1E+13
Test Site						
Tester						
Test Number						
Max Limit	1.24	V				
Min Limit	1.18	V				
NeutronFluence	0	1.180	1.180	1.180	1.180	1.180
LL		1.211	1.222	1.225	1.223	1.223
Min		1.213	1.224	1.226	1.225	1.224
Average		1.214	1.226	1.227	1.226	1.226
Max		1.240	1.240	1.240	1.240	1.240
UL						



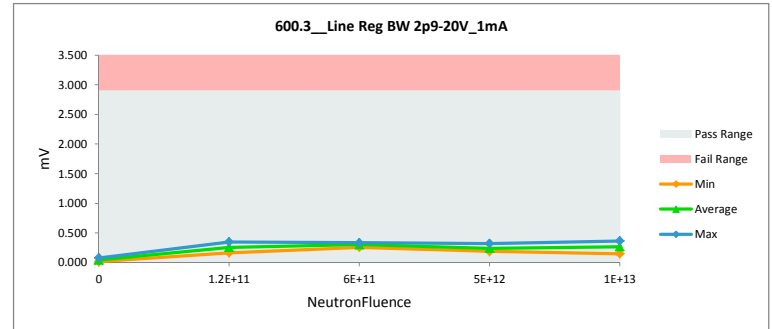
NDD Report
Device Name TPS7A4501

600.3_Line Reg BW 2p9-20V_1		
Test Site		
Tester		
Test Number		
Unit	mV	mV
Max Limit	2.9	2.9
Min Limit	0	0

NeutronFluence	Serial #	01152015_pre.txt	01112015_post.txt	Delta	Delta %	% of Limit Range
0	127	0.050	0.050	0.000	0.00%	0.00%
0	128	0.022	0.022	0.000	0.00%	0.00%
0	129	0.078	0.078	0.000	0.00%	0.00%
0	130	0.054	0.054	0.000	0.00%	0.00%
1.2E+11	131	0.017	0.166	-0.149	-876.47%	5.14%
1.2E+11	132	0.021	0.347	-0.326	-1552.38%	11.24%
1.2E+11	133	0.015	0.247	-0.232	-1546.67%	8.00%
1.2E+11	134	0.022	0.223	-0.201	-913.64%	6.93%
1.2E+11	135	0.004	0.305	-0.301	-7525.00%	10.38%
6E+11	136	0.069	0.256	-0.187	-271.01%	6.45%
6E+11	137	0.012	0.323	-0.311	-2591.67%	10.72%
6E+11	138	0.005	0.288	-0.283	-5660.00%	9.76%
6E+11	139	0.026	0.336	-0.310	-1192.31%	10.69%
6E+11	140	0.011	0.303	-0.292	-2654.55%	10.07%
5E+12	141	0.016	0.251	-0.235	-1468.75%	8.10%
0	142	0.017	0.017	0.000	0.00%	0.00%
5E+12	143	0.050	0.188	-0.138	-276.00%	4.76%
5E+12	144	0.019	0.244	-0.225	-1184.21%	7.76%
5E+12	145	0.009	0.322	-0.313	-3477.78%	10.79%
5E+12	146	0.027	0.195	-0.168	-622.22%	5.79%
1E+13	147	0.028	0.158	-0.130	-464.29%	4.48%
1E+13	148	0.074	0.364	-0.290	-391.89%	10.00%
1E+13	149	0.057	0.358	-0.301	-528.07%	10.38%
1E+13	150	0.022	0.306	-0.284	-1290.91%	9.79%
1E+13	151	0.037	0.148	-0.111	-300.00%	3.83%
Max		0.078	0.364	0.000	0.00%	11.24%
Average		0.030	0.222	-0.191	-1391.51%	6.60%
Min		0.004	0.017	-0.326	-7525.00%	0.00%
Std Dev		0.022	0.110	0.116	1830.75%	4.02%



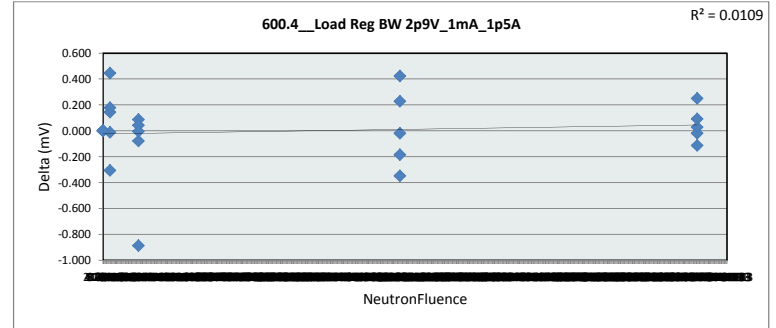
600.3_Line Reg BW 2p9-2					
Test Site					
Tester					
Test Number					
Max Limit	2.9		mV		
Min Limit	0		mV		
NeutronFluence	0	1.2E+11	6E+11	5E+12	1E+13
LL	0.000	0.000	0.000	0.000	0.000
Min	0.017	0.166	0.256	0.188	0.148
Average	0.044	0.258	0.301	0.240	0.267
Max	0.078	0.347	0.336	0.322	0.364
UL	2.900	2.900	2.900	2.900	2.900



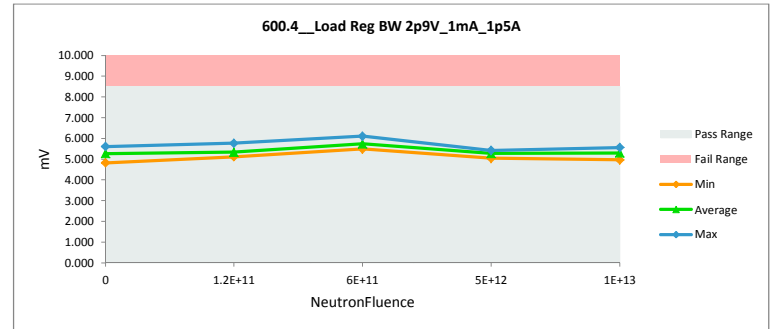
NDD Report
Device Name TPS7A4501

600.4_Load Reg BW 2p9V_1mA		
Test Site		
Tester		
Test Number		
Unit	mV	mV
Max Limit	8.5	8.5
Min Limit	0	0

NeutronFluence	Serial #	01152015_pre.txt	01112015_post.txt	Delta	Delta %	% of Limit Range
0	127	5.352	5.352	0.000	0.00%	0.00%
0	128	5.046	5.046	0.000	0.00%	0.00%
0	129	4.823	4.823	0.000	0.00%	0.00%
0	130	5.611	5.611	0.000	0.00%	0.00%
1.2E+11	131	5.239	5.252	-0.013	-0.25%	0.15%
1.2E+11	132	5.459	5.766	-0.307	-5.62%	3.61%
1.2E+11	133	5.560	5.416	0.144	2.59%	1.69%
1.2E+11	134	5.327	5.149	0.178	3.34%	2.09%
1.2E+11	135	5.558	5.112	0.446	8.02%	5.25%
6E+11	136	5.412	5.491	-0.079	-1.46%	0.93%
6E+11	137	5.919	5.831	0.088	1.49%	1.04%
6E+11	138	5.223	6.111	-0.888	-17.00%	10.45%
6E+11	139	5.714	5.671	0.043	0.75%	0.51%
6E+11	140	5.570	5.575	-0.005	-0.09%	0.06%
5E+12	141	5.016	5.363	-0.347	-6.92%	4.08%
0	142	5.497	5.497	0.000	0.00%	0.00%
5E+12	143	5.464	5.041	0.423	7.74%	4.98%
5E+12	144	5.099	5.285	-0.186	-3.65%	2.19%
5E+12	145	5.244	5.263	-0.019	-0.36%	0.22%
5E+12	146	5.651	5.422	0.229	4.05%	2.69%
1E+13	147	5.362	5.270	0.092	1.72%	1.08%
1E+13	148	5.208	5.227	-0.019	-0.36%	0.22%
1E+13	149	5.451	5.565	-0.114	-2.09%	1.34%
1E+13	150	5.221	4.971	0.250	4.79%	2.94%
1E+13	151	5.499	5.472	0.027	0.49%	0.32%
Max		5.919	6.111	0.446	8.02%	10.45%
Average		5.381	5.383	-0.002	-0.11%	1.83%
Min		4.823	4.823	-0.888	-17.00%	0.00%
Std Dev		0.244	0.291	0.260	4.90%	2.42%



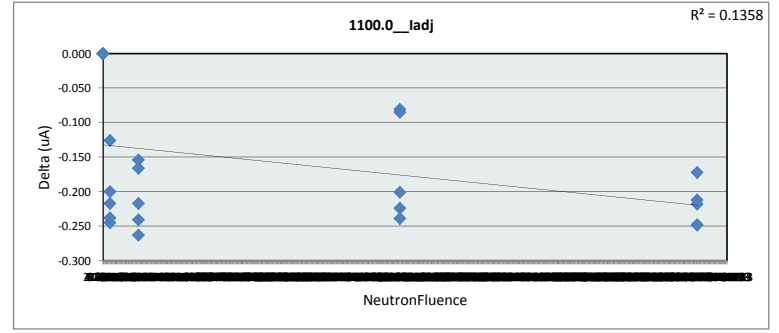
600.4_Load Reg BW 2p9V					
Test Site					
Tester					
Test Number					
Max Limit	8.5		mV		
Min Limit	0		mV		
NeutronFluence	0	1.2E+11	6E+11	5E+12	1E+13
LL	0.000	0.000	0.000	0.000	0.000
Min	4.823	5.112	5.491	5.041	4.971
Average	5.266	5.339	5.736	5.275	5.301
Max	5.611	5.766	6.111	5.422	5.565
UL	8.500	8.500	8.500	8.500	8.500



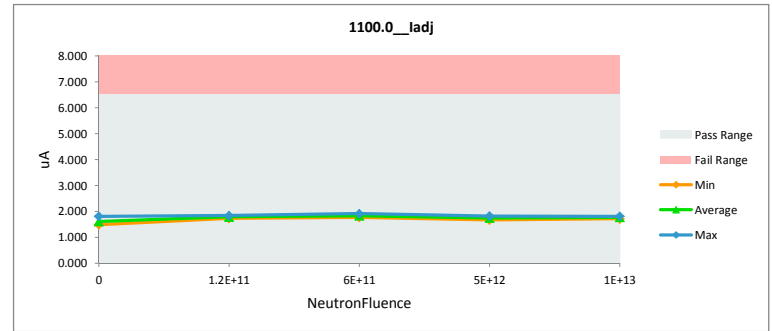
NDD Report
Device Name TPS7A4501

1100.0_ladj	
Test Site	
Tester	
Test Number	
Unit	uA uA
Max Limit	6.5 6.5
Min Limit	0 0

NeutronFluence	Serial #	01152015_pre.txt	01112015_post.txt	Delta	Delta %	% of Limit Range
0	127	1.541	1.541	0.000	0.00%	0.00%
0	128	1.806	1.806	0.000	0.00%	0.00%
0	129	1.683	1.683	0.000	0.00%	0.00%
0	130	1.489	1.489	0.000	0.00%	0.00%
1.2E+11	131	1.517	1.734	-0.217	-14.30%	3.34%
1.2E+11	132	1.629	1.755	-0.126	-7.73%	1.94%
1.2E+11	133	1.552	1.797	-0.245	-15.79%	3.77%
1.2E+11	134	1.639	1.839	-0.200	-12.20%	3.08%
1.2E+11	135	1.578	1.816	-0.238	-15.08%	3.66%
6E+11	136	1.760	1.914	-0.154	-8.75%	2.37%
6E+11	137	1.629	1.795	-0.166	-10.19%	2.55%
6E+11	138	1.606	1.823	-0.217	-13.51%	3.34%
6E+11	139	1.532	1.773	-0.241	-15.73%	3.71%
6E+11	140	1.597	1.860	-0.263	-16.47%	4.05%
5E+12	141	1.709	1.790	-0.081	-4.74%	1.25%
0	142	1.549	1.549	0.000	0.00%	0.00%
5E+12	143	1.588	1.673	-0.085	-5.35%	1.31%
5E+12	144	1.621	1.822	-0.201	-12.40%	3.09%
5E+12	145	1.496	1.735	-0.239	-15.98%	3.68%
5E+12	146	1.496	1.720	-0.224	-14.97%	3.45%
1E+13	147	1.501	1.713	-0.212	-14.12%	3.26%
1E+13	148	1.561	1.809	-0.248	-15.89%	3.82%
1E+13	149	1.559	1.807	-0.248	-15.91%	3.82%
1E+13	150	1.569	1.787	-0.218	-13.89%	3.35%
1E+13	151	1.568	1.740	-0.172	-10.97%	2.65%
Max		1.806	1.914	0.000	0.00%	4.05%
Average		1.591	1.751	-0.160	-10.16%	2.46%
Min		1.489	1.489	-0.263	-16.47%	0.00%
Std Dev		0.081	0.101	0.094	6.10%	1.45%



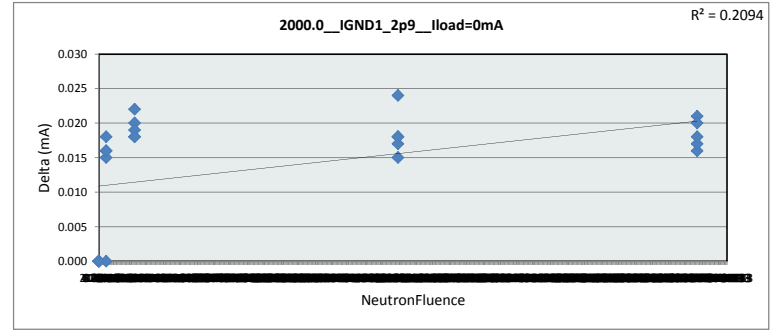
1100.0_ladj		0	1.2E+11	6E+11	5E+12	1E+13
Test Site						
Tester						
Test Number						
Max Limit	6.5 uA					
Min Limit	0 uA					
NeutronFluence		0.000	0.000	0.000	0.000	0.000
LL		0.000	0.000	0.000	0.000	0.000
Min		1.489	1.734	1.773	1.673	1.713
Average		1.614	1.788	1.833	1.748	1.771
Max		1.806	1.839	1.914	1.822	1.809
UL		6.500	6.500	6.500	6.500	6.500



NDD Report
Device Name TPS7A4501

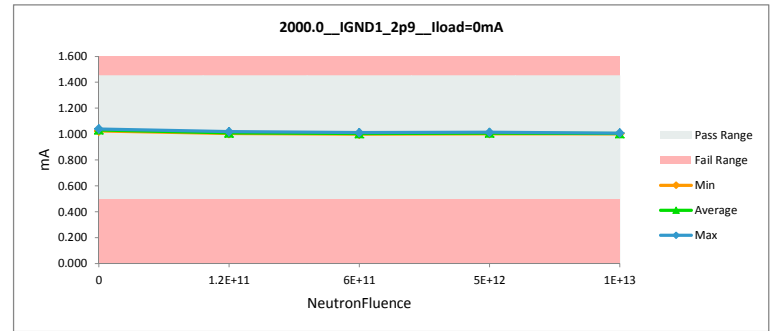
2000.0 IGND1_2p9 Iload=0mA	
Test Site	
Tester	
Test Number	
Unit	mA
Max Limit	1.45
Min Limit	0.5

NeutronFluence	Serial #	01152015_pre.txt	01112015_post.txt	Delta	Delta %	% of Limit Range
0	127	1.033	1.033	0.000	0.00%	0.00%
0	128	1.039	1.039	0.000	0.00%	0.00%
0	129	1.039	1.039	0.000	0.00%	0.00%
0	130	1.023	1.023	0.000	0.00%	0.00%
1.2E+11	131	1.020	1.005	0.015	1.47%	1.58%
1.2E+11	132	1.018	1.018	0.000	0.00%	0.00%
1.2E+11	133	1.020	1.004	0.016	1.57%	1.68%
1.2E+11	134	1.026	1.010	0.016	1.56%	1.68%
1.2E+11	135	1.025	1.007	0.018	1.76%	1.89%
6E+11	136	1.029	1.011	0.018	1.75%	1.89%
6E+11	137	1.024	1.002	0.022	2.15%	2.32%
6E+11	138	1.019	0.999	0.020	1.96%	2.11%
6E+11	139	1.019	1.000	0.019	1.86%	2.00%
6E+11	140	1.022	1.004	0.018	1.76%	1.89%
5E+12	141	1.032	1.014	0.018	1.74%	1.89%
0	142	1.024	1.024	0.000	0.00%	0.00%
5E+12	143	1.025	1.008	0.017	1.66%	1.79%
5E+12	144	1.028	1.004	0.024	2.33%	2.53%
5E+12	145	1.020	1.002	0.018	1.76%	1.89%
5E+12	146	1.027	1.012	0.015	1.46%	1.58%
1E+13	147	1.018	1.002	0.016	1.57%	1.68%
1E+13	148	1.024	1.007	0.017	1.66%	1.79%
1E+13	149	1.022	1.004	0.018	1.76%	1.89%
1E+13	150	1.024	1.003	0.021	2.05%	2.21%
1E+13	151	1.025	1.005	0.020	1.95%	2.11%
Max		1.039	1.039	0.024	2.33%	2.53%
Average		1.025	1.011	0.014	1.35%	1.46%
Min		1.018	0.999	0.000	0.00%	0.00%
Std Dev		0.006	0.012	0.008	0.80%	0.86%



2000.0 IGND1_2p9 Iload=0mA	
Test Site	
Tester	
Test Number	
Max Limit	1.45 mA
Min Limit	0.5 mA

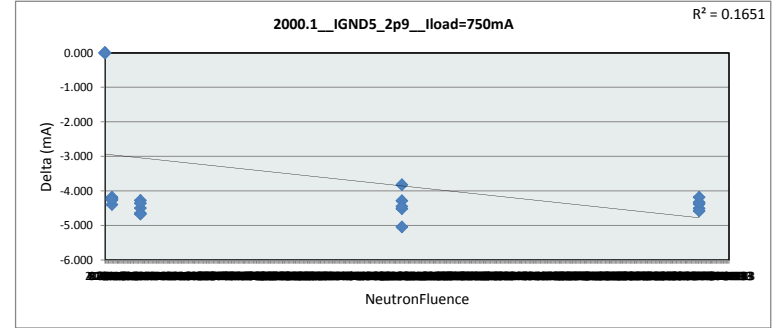
NeutronFluence	0	1.2E+11	6E+11	5E+12	1E+13
LL	0.500	0.500	0.500	0.500	0.500
Min	1.023	1.004	0.999	1.002	1.002
Average	1.032	1.009	1.003	1.008	1.004
Max	1.039	1.018	1.011	1.014	1.007
UL	1.450	1.450	1.450	1.450	1.450



NDD Report
Device Name TPS7A4501

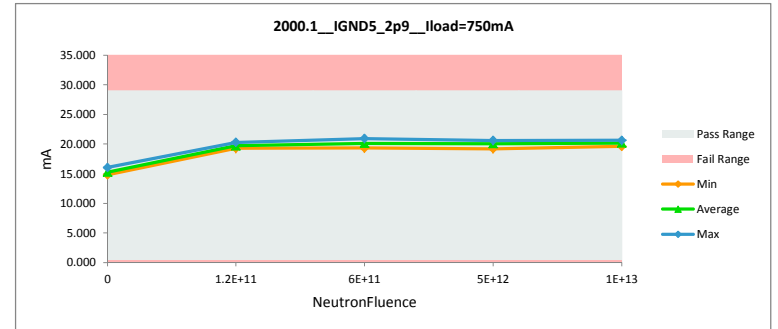
2000.1_IGND5_2p9_Iload=75	
Test Site	
Tester	
Test Number	
Unit	mA
Max Limit	29
Min Limit	0.5

NeutronFluence	Serial #	01152015_pre.txt	01112015_post.txt	Delta	Delta %	% of Limit Range
0	127	15.030	15.030	0.000	0.00%	0.00%
0	128	14.794	14.794	0.000	0.00%	0.00%
0	129	15.044	15.044	0.000	0.00%	0.00%
0	130	16.043	16.043	0.000	0.00%	0.00%
1.2E+11	131	15.351	19.539	-4.188	-27.28%	14.69%
1.2E+11	132	16.056	20.287	-4.231	-26.35%	14.85%
1.2E+11	133	15.449	19.846	-4.397	-28.46%	15.43%
1.2E+11	134	15.385	19.630	-4.245	-27.59%	14.89%
1.2E+11	135	14.993	19.263	-4.270	-28.48%	14.98%
6E+11	136	15.048	19.329	-4.281	-28.45%	15.02%
6E+11	137	16.271	20.919	-4.648	-28.57%	16.31%
6E+11	138	15.316	19.814	-4.498	-29.37%	15.78%
6E+11	139	15.584	19.945	-4.361	-27.98%	15.30%
6E+11	140	15.905	20.585	-4.680	-29.42%	16.42%
5E+12	141	14.903	19.191	-4.288	-28.77%	15.05%
0	142	15.377	15.377	0.000	0.00%	0.00%
5E+12	143	15.278	20.326	-5.048	-33.04%	17.71%
5E+12	144	15.915	19.737	-3.822	-24.02%	13.41%
5E+12	145	16.070	20.587	-4.517	-28.11%	15.85%
5E+12	146	15.958	20.415	-4.457	-27.93%	15.64%
1E+13	147	16.130	20.638	-4.508	-27.95%	15.82%
1E+13	148	15.807	20.183	-4.376	-27.68%	15.35%
1E+13	149	15.899	20.480	-4.581	-28.81%	16.07%
1E+13	150	15.259	19.590	-4.331	-28.38%	15.20%
1E+13	151	15.793	19.982	-4.189	-26.52%	14.70%
Max		16.271	20.919	0.000	0.00%	17.71%
Average		15.546	19.063	-3.517	-22.53%	12.34%
Min		14.794	14.794	-5.048	-33.04%	0.00%
Std Dev		0.442	2.003	1.808	11.59%	6.34%



2000.1_IGND5_2p9_Iload	
Test Site	
Tester	
Test Number	
Max Limit	29 mA
Min Limit	0.5 mA

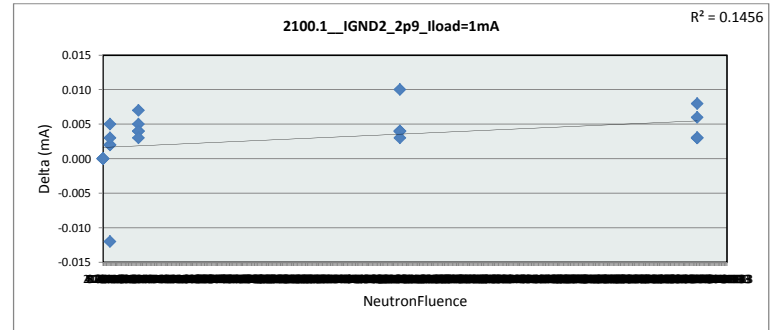
NeutronFluence	0	1.2E+11	6E+11	5E+12	1E+13
LL	0.500	0.500	0.500	0.500	0.500
Min	14.794	19.263	19.329	19.191	19.590
Average	15.258	19.713	20.118	20.051	20.175
Max	16.043	20.287	20.919	20.587	20.638
UL	29.000	29.000	29.000	29.000	29.000



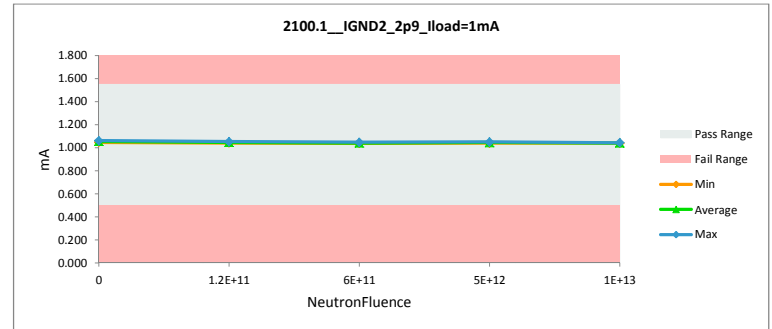
NDD Report
Device Name TPS7A4501

Test Site	2100.1 _IGND2_2p9_Ifload=1mA	
Tester		
Test Number		
Unit	mA	mA
Max Limit	1.55	1.55
Min Limit	0.5	0.5

NeutronFluence	Serial #	01152015_pre.txt	01112015_post.txt	Delta	Delta %	% of Limit Range
0	127	1.055	1.055	0.000	0.00%	0.00%
0	128	1.060	1.060	0.000	0.00%	0.00%
0	129	1.061	1.061	0.000	0.00%	0.00%
0	130	1.045	1.045	0.000	0.00%	0.00%
1.2E+11	131	1.043	1.041	0.002	0.19%	0.19%
1.2E+11	132	1.041	1.053	-0.012	-1.15%	1.14%
1.2E+11	133	1.042	1.040	0.002	0.19%	0.19%
1.2E+11	134	1.050	1.047	0.003	0.29%	0.29%
1.2E+11	135	1.048	1.043	0.005	0.48%	0.48%
6E+11	136	1.051	1.047	0.004	0.38%	0.38%
6E+11	137	1.046	1.039	0.007	0.67%	0.67%
6E+11	138	1.042	1.037	0.005	0.48%	0.48%
6E+11	139	1.041	1.037	0.004	0.38%	0.38%
6E+11	140	1.045	1.042	0.003	0.29%	0.29%
5E+12	141	1.053	1.049	0.004	0.38%	0.38%
0	142	1.045	1.045	0.000	0.00%	0.00%
5E+12	143	1.048	1.044	0.004	0.38%	0.38%
5E+12	144	1.051	1.041	0.010	0.95%	0.95%
5E+12	145	1.043	1.039	0.004	0.38%	0.38%
5E+12	146	1.050	1.047	0.003	0.29%	0.29%
1E+13	147	1.042	1.039	0.003	0.29%	0.29%
1E+13	148	1.046	1.043	0.003	0.29%	0.29%
1E+13	149	1.044	1.041	0.003	0.29%	0.29%
1E+13	150	1.046	1.038	0.008	0.76%	0.76%
1E+13	151	1.047	1.041	0.006	0.57%	0.57%
Max		1.061	1.061	0.010	0.95%	1.14%
Average		1.047	1.045	0.003	0.27%	0.36%
Min		1.041	1.037	-0.012	-1.15%	0.00%
Std Dev		0.005	0.007	0.004	0.38%	0.29%



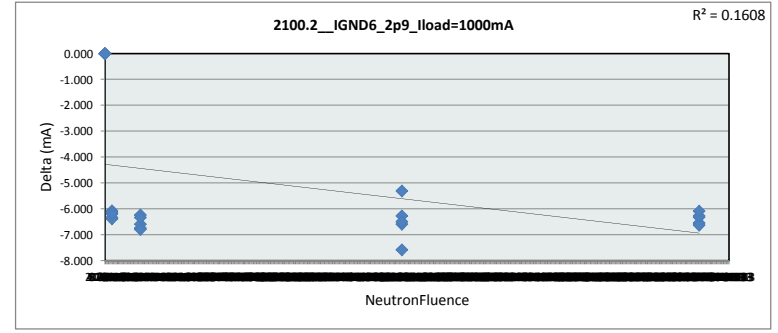
Test Site	2100.1 _IGND2_2p9_Ifload=1mA				
Tester					
Test Number					
Max Limit	1.55	mA			
Min Limit	0.5	mA			
NeutronFluence	0	1.2E+11	6E+11	5E+12	1E+13
LL	0.500	0.500	0.500	0.500	0.500
Min	1.045	1.040	1.037	1.039	1.038
Average	1.053	1.045	1.040	1.044	1.040
Max	1.061	1.053	1.047	1.049	1.043
UL	1.550	1.550	1.550	1.550	1.550



NDD Report
Device Name TPS7A4501

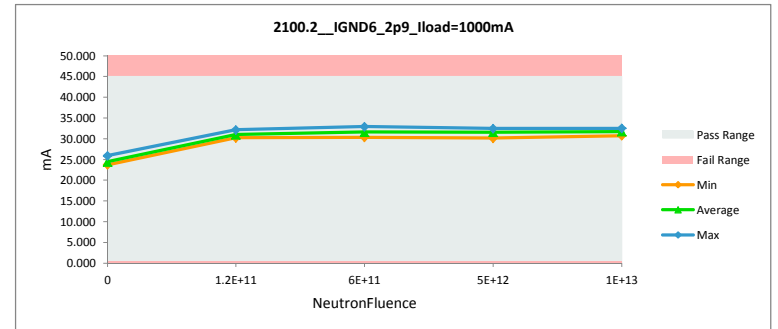
2100.2_IGND6_2p9_Iload=1000	
Test Site	
Tester	
Test Number	
Unit	mA mA
Max Limit	45 45
Min Limit	0.5 0.5

NeutronFluence	Serial #	01152015_pre.txt	01112015_post.txt	Delta	Delta %	% of Limit Range
0	127	24.134	24.134	0.000	0.00%	0.00%
0	128	23.721	23.721	0.000	0.00%	0.00%
0	129	24.178	24.178	0.000	0.00%	0.00%
0	130	25.925	25.925	0.000	0.00%	0.00%
1.2E+11	131	24.625	30.694	-6.069	-24.65%	13.64%
1.2E+11	132	25.840	32.170	-6.330	-24.50%	14.22%
1.2E+11	133	24.777	31.155	-6.378	-25.74%	14.33%
1.2E+11	134	24.692	30.832	-6.140	-24.87%	13.80%
1.2E+11	135	24.054	30.252	-6.198	-25.77%	13.93%
6E+11	136	24.120	30.354	-6.234	-25.85%	14.01%
6E+11	137	26.194	32.941	-6.747	-25.76%	15.16%
6E+11	138	24.575	31.169	-6.594	-26.83%	14.82%
6E+11	139	25.059	31.390	-6.331	-25.26%	14.23%
6E+11	140	25.546	32.338	-6.792	-26.59%	15.26%
5E+12	141	23.875	30.145	-6.270	-26.26%	14.09%
0	142	24.300	24.300	0.000	0.00%	0.00%
5E+12	143	24.517	32.100	-7.583	-30.93%	17.04%
5E+12	144	25.672	30.976	-5.304	-20.66%	11.92%
5E+12	145	25.891	32.485	-6.594	-25.47%	14.82%
5E+12	146	25.697	32.193	-6.496	-25.28%	14.60%
1E+13	147	25.972	32.520	-6.548	-25.21%	14.71%
1E+13	148	25.364	31.691	-6.327	-24.94%	14.22%
1E+13	149	25.531	32.164	-6.633	-25.98%	14.91%
1E+13	150	24.465	30.733	-6.268	-25.62%	14.09%
1E+13	151	25.459	31.544	-6.085	-23.90%	13.67%
Max		26.194	32.941	0.000	0.00%	17.04%
Average		24.967	30.084	-5.117	-20.40%	11.50%
Min		23.721	23.721	-7.583	-30.93%	0.00%
Std Dev		0.765	2.991	2.638	10.54%	5.93%



2100.2_IGND6_2p9_Iload=1000	
Test Site	
Tester	
Test Number	
Max Limit	45 mA
Min Limit	0.5 mA

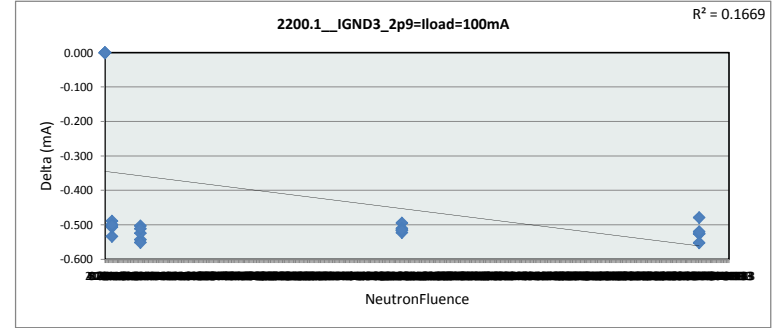
NeutronFluence	0	1.2E+11	6E+11	5E+12	1E+13
LL	0.500	0.500	0.500	0.500	0.500
Min	23.721	30.252	30.354	30.145	30.733
Average	24.452	31.021	31.638	31.580	31.730
Max	25.925	32.170	32.941	32.485	32.520
UL	45.000	45.000	45.000	45.000	45.000



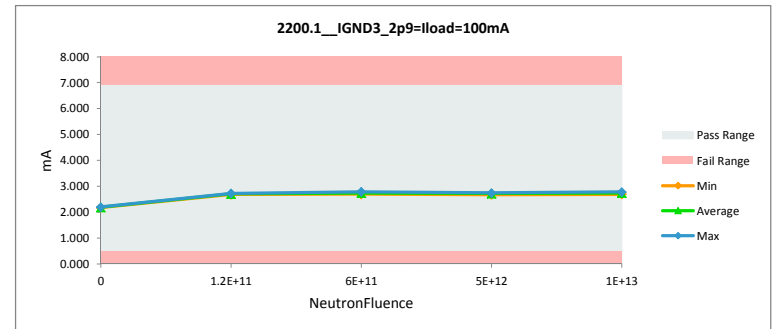
NDD Report
Device Name TPS7A4501

2200.1_IGND3_2p9=Iload=100	
Test Site	
Tester	
Test Number	
Unit	mA mA
Max Limit	6.9 6.9
Min Limit	0.5 0.5

NeutronFluence	Serial #	01152015_pre.txt	01112015_post.txt	Delta	Delta %	% of Limit Range
0	127	2.186	2.186	0.000	0.00%	0.00%
0	128	2.183	2.183	0.000	0.00%	0.00%
0	129	2.192	2.192	0.000	0.00%	0.00%
0	130	2.202	2.202	0.000	0.00%	0.00%
1.2E+11	131	2.205	2.694	-0.489	-22.18%	7.64%
1.2E+11	132	2.219	2.718	-0.499	-22.49%	7.80%
1.2E+11	133	2.194	2.727	-0.533	-24.29%	8.33%
1.2E+11	134	2.199	2.705	-0.506	-23.01%	7.91%
1.2E+11	135	2.180	2.680	-0.500	-22.94%	7.81%
6E+11	136	2.190	2.693	-0.503	-22.97%	7.86%
6E+11	137	2.243	2.786	-0.543	-24.21%	8.48%
6E+11	138	2.195	2.719	-0.524	-23.87%	8.19%
6E+11	139	2.205	2.716	-0.511	-23.17%	7.98%
6E+11	140	2.231	2.782	-0.551	-24.70%	8.61%
5E+12	141	2.185	2.679	-0.494	-22.61%	7.72%
0	142	2.175	2.175	0.000	0.00%	0.00%
5E+12	143	2.199	2.709	-0.510	-23.19%	7.97%
5E+12	144	2.211	2.726	-0.515	-23.29%	8.05%
5E+12	145	2.220	2.742	-0.522	-23.51%	8.16%
5E+12	146	2.225	2.741	-0.516	-23.19%	8.06%
1E+13	147	2.228	2.754	-0.526	-23.61%	8.22%
1E+13	148	2.231	2.756	-0.525	-23.53%	8.20%
1E+13	149	2.230	2.782	-0.552	-24.75%	8.63%
1E+13	150	2.199	2.718	-0.519	-23.60%	8.11%
1E+13	151	2.210	2.689	-0.479	-21.67%	7.48%
Max		2.243	2.786	0.000	0.00%	8.63%
Average		2.205	2.618	-0.413	-18.67%	6.45%
Min		2.175	2.175	-0.552	-24.75%	0.00%
Std Dev		0.019	0.222	0.211	9.55%	3.30%



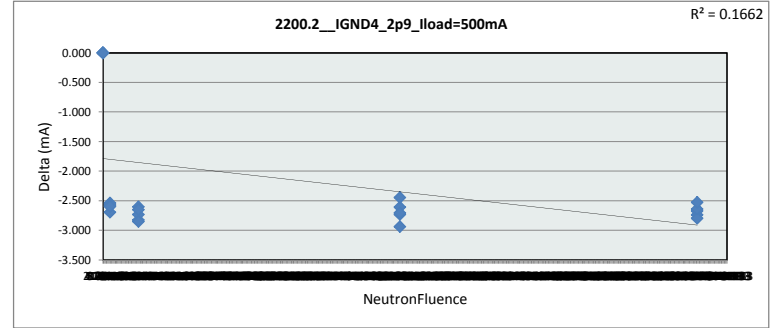
2200.1_IGND3_2p9=Iload		0	1.2E+11	6E+11	5E+12	1E+13
Test Site						
Tester						
Test Number						
Max Limit	6.9	mA				
Min Limit	0.5	mA				
NeutronFluence						
LL	0.500	0.500	0.500	0.500	0.500	0.500
Min	2.175	2.680	2.693	2.679	2.689	
Average	2.188	2.705	2.739	2.719	2.740	
Max	2.202	2.727	2.786	2.742	2.782	
UL	6.900	6.900	6.900	6.900	6.900	



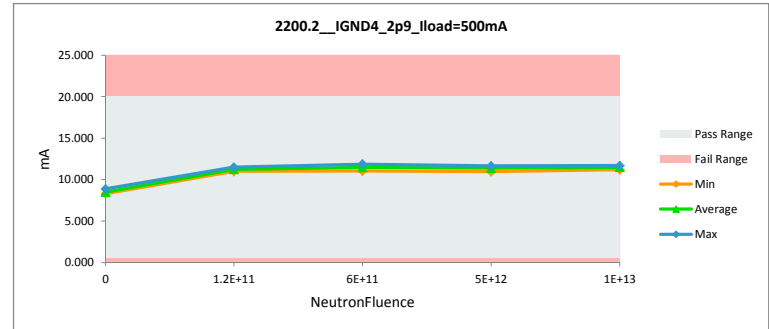
NDD Report
Device Name TPS7A4501

2200.2_IGND4_2p9_Ifload=500	
Test Site	
Tester	
Test Number	
Unit	mA mA
Max Limit	20 20
Min Limit	0.5 0.5

NeutronFluence	Serial #	01152015_pre.txt	01112015_post.txt	Delta	Delta %	% of Limit Range
0	127	8.415	8.415	0.000	0.00%	0.00%
0	128	8.300	8.300	0.000	0.00%	0.00%
0	129	8.408	8.408	0.000	0.00%	0.00%
0	130	8.873	8.873	0.000	0.00%	0.00%
1.2E+11	131	8.587	11.128	-2.541	-29.59%	13.03%
1.2E+11	132	8.929	11.488	-2.559	-28.66%	13.12%
1.2E+11	133	8.621	11.316	-2.695	-31.26%	13.82%
1.2E+11	134	8.590	11.176	-2.586	-30.10%	13.26%
1.2E+11	135	8.396	10.992	-2.596	-30.92%	13.31%
6E+11	136	8.427	11.033	-2.606	-30.92%	13.36%
6E+11	137	9.046	11.869	-2.823	-31.21%	14.48%
6E+11	138	8.567	11.298	-2.731	-31.88%	14.01%
6E+11	139	8.697	11.349	-2.652	-30.49%	13.60%
6E+11	140	8.873	11.728	-2.855	-32.18%	14.64%
5E+12	141	8.350	10.957	-2.607	-31.22%	13.37%
0	142	8.457	8.457	0.000	0.00%	0.00%
5E+12	143	8.548	11.485	-2.937	-34.36%	15.06%
5E+12	144	8.817	11.265	-2.448	-27.76%	12.55%
5E+12	145	8.911	11.647	-2.736	-30.70%	14.03%
5E+12	146	8.856	11.564	-2.708	-30.58%	13.89%
1E+13	147	8.951	11.691	-2.740	-30.61%	14.05%
1E+13	148	8.825	11.499	-2.674	-30.30%	13.71%
1E+13	149	8.864	11.661	-2.797	-31.55%	14.34%
1E+13	150	8.540	11.184	-2.644	-30.96%	13.56%
1E+13	151	8.764	11.293	-2.529	-28.86%	12.97%
Max		9.046	11.869	0.000	0.00%	15.06%
Average		8.664	10.803	-2.139	-24.56%	10.97%
Min		8.300	8.300	-2.937	-34.36%	0.00%
Std Dev		0.220	1.206	1.097	12.60%	5.62%



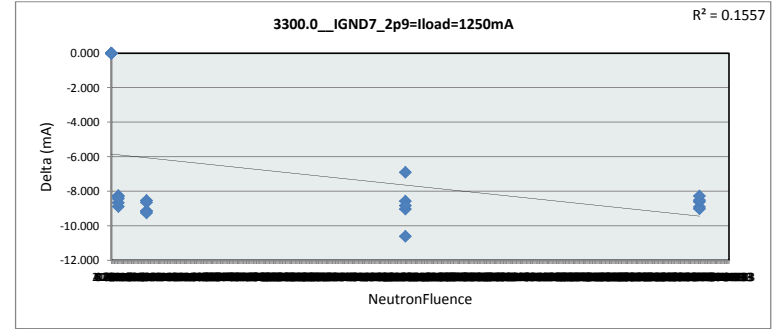
2200.2_IGND4_2p9_Ifload=500					
Test Site					
Tester					
Test Number					
Max Limit	20 mA				
Min Limit	0.5 mA				
NeutronFluence	0	1.2E+11	6E+11	5E+12	1E+13
LL	0.500	0.500	0.500	0.500	0.500
Min	8.300	10.992	11.033	10.957	11.184
Average	8.491	11.220	11.455	11.384	11.466
Max	8.873	11.488	11.869	11.647	11.691
UL	20.000	20.000	20.000	20.000	20.000



NDD Report
Device Name TPS7A4501

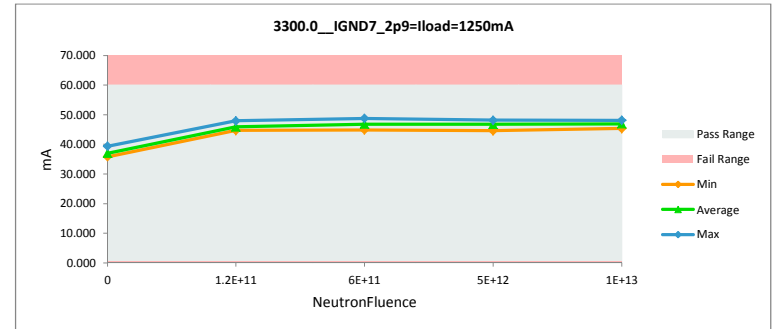
Test Site	3300.0 IGND7_2p9=Iload=125	
Tester		
Test Number		
Unit	mA	mA
Max Limit	60	60
Min Limit	0.5	0.5

NeutronFluence	Serial #	01152015_pre.txt	01112015_post.txt	Delta	Delta %	% of Limit Range
0	127	36.513	36.513	0.000	0.00%	0.00%
0	128	35.817	35.817	0.000	0.00%	0.00%
0	129	36.502	36.502	0.000	0.00%	0.00%
0	130	39.365	39.365	0.000	0.00%	0.00%
1.2E+11	131	37.103	45.362	-8.259	-22.26%	13.88%
1.2E+11	132	39.080	47.963	-8.883	-22.73%	14.93%
1.2E+11	133	37.382	46.047	-8.665	-23.18%	14.56%
1.2E+11	134	37.214	45.526	-8.312	-22.34%	13.97%
1.2E+11	135	36.271	44.691	-8.420	-23.21%	14.15%
6E+11	136	36.338	44.878	-8.540	-23.50%	14.35%
6E+11	137	39.608	48.756	-9.148	-23.10%	15.37%
6E+11	138	37.047	46.204	-9.157	-24.72%	15.39%
6E+11	139	37.827	46.483	-8.656	-22.88%	14.55%
6E+11	140	38.563	47.818	-9.255	-24.00%	15.55%
5E+12	141	36.005	44.578	-8.573	-23.81%	14.41%
0	142	36.723	36.723	0.000	0.00%	0.00%
5E+12	143	36.960	47.583	-10.623	-28.74%	17.85%
5E+12	144	38.849	45.746	-6.897	-17.75%	11.59%
5E+12	145	39.120	48.156	-9.036	-23.10%	15.19%
5E+12	146	38.861	47.687	-8.826	-22.71%	14.83%
1E+13	147	39.214	48.125	-8.911	-22.72%	14.98%
1E+13	148	38.217	46.825	-8.608	-22.52%	14.47%
1E+13	149	38.502	47.520	-9.018	-23.42%	15.16%
1E+13	150	36.869	45.380	-8.511	-23.08%	14.30%
1E+13	151	38.495	46.777	-8.282	-21.51%	13.92%
Max		39.608	48.756	0.000	0.00%	17.85%
Average		37.698	44.681	-6.983	-18.45%	11.74%
Min		35.817	35.817	-10.623	-28.74%	0.00%
Std Dev		1.191	4.132	3.614	9.57%	6.07%



Test Site	3300.0 IGND7_2p9=Iload	
Tester		
Test Number		
Max Limit	60	mA
Min Limit	0.5	mA

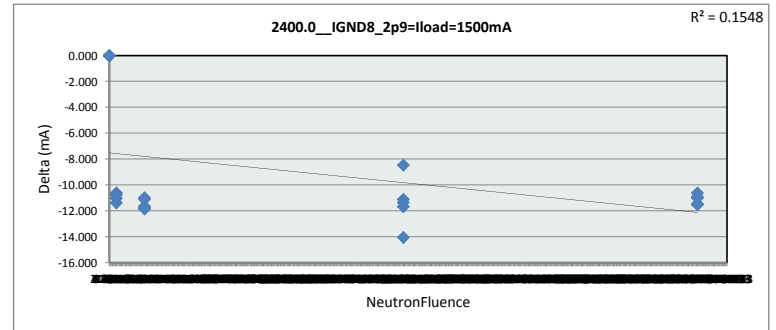
NeutronFluence	0	1.2E+11	6E+11	5E+12	1E+13
LL	0.500	0.500	0.500	0.500	0.500
Min	35.817	44.691	44.878	44.578	45.380
Average	36.984	45.918	46.828	46.750	46.925
Max	39.365	47.963	48.756	48.156	48.125
UL	60.000	60.000	60.000	60.000	60.000



NDD Report
Device Name TPS7A4501

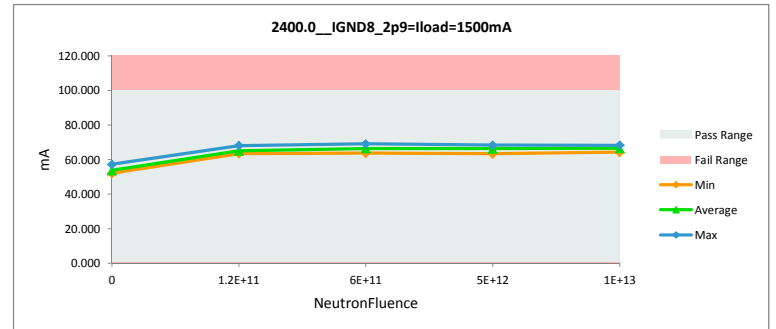
2400.0_IGND8_2p9=Iload=1500	
Test Site	
Tester	
Test Number	
Unit	mA mA
Max Limit	100 100
Min Limit	0.5 0.5

NeutronFluence	Serial #	01152015_pre.txt	01112015_post.txt	Delta	Delta %	% of Limit Range
0	127	53.066	53.066	0.000	0.00%	0.00%
0	128	51.984	51.984	0.000	0.00%	0.00%
0	129	52.992	52.992	0.000	0.00%	0.00%
0	130	57.212	57.212	0.000	0.00%	0.00%
1.2E+11	131	53.738	64.356	-10.618	-19.76%	10.67%
1.2E+11	132	56.606	67.994	-11.388	-20.12%	11.45%
1.2E+11	133	54.170	65.216	-11.046	-20.39%	11.10%
1.2E+11	134	53.901	64.571	-10.670	-19.80%	10.72%
1.2E+11	135	52.576	63.369	-10.793	-20.53%	10.85%
6E+11	136	52.674	63.672	-10.998	-20.88%	11.05%
6E+11	137	57.358	69.025	-11.667	-20.34%	11.73%
6E+11	138	53.654	65.510	-11.856	-22.10%	11.92%
6E+11	139	54.778	65.882	-11.104	-20.27%	11.16%
6E+11	140	55.783	67.562	-11.779	-21.12%	11.84%
5E+12	141	52.163	63.279	-11.116	-21.31%	11.17%
0	142	53.306	53.306	0.000	0.00%	0.00%
5E+12	143	53.521	67.578	-14.057	-26.26%	14.13%
5E+12	144	56.306	64.782	-8.476	-15.05%	8.52%
5E+12	145	56.656	68.329	-11.673	-20.60%	11.73%
5E+12	146	56.275	67.634	-11.359	-20.18%	11.42%
1E+13	147	56.761	68.211	-11.450	-20.17%	11.51%
1E+13	148	55.262	66.267	-11.005	-19.91%	11.06%
1E+13	149	55.678	67.211	-11.533	-20.71%	11.59%
1E+13	150	53.368	64.274	-10.906	-20.44%	10.96%
1E+13	151	55.850	66.478	-10.628	-19.03%	10.68%
Max		57.358	69.025	0.000	0.00%	14.13%
Average		54.626	63.590	-8.965	-16.36%	9.01%
Min		51.984	51.984	-14.057	-26.26%	0.00%
Std Dev		1.706	5.357	4.658	8.52%	4.68%



2400.0_IGND8_2p9=Iload=1500	
Test Site	
Tester	
Test Number	
Max Limit	100 mA
Min Limit	0.5 mA

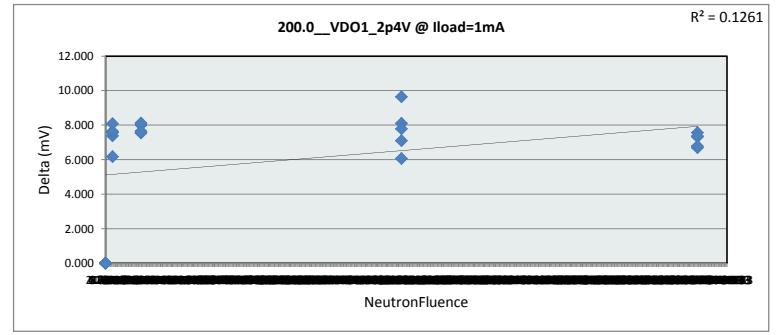
NeutronFluence	0	1.2E+11	6E+11	5E+12	1E+13
LL	0.500	0.500	0.500	0.500	0.500
Min	51.984	63.369	63.672	63.279	64.274
Average	53.712	65.101	66.330	66.320	66.488
Max	57.212	67.994	69.025	68.329	68.211
UL	100.000	100.000	100.000	100.000	100.000



NDD Report
Device Name TPS7A4501

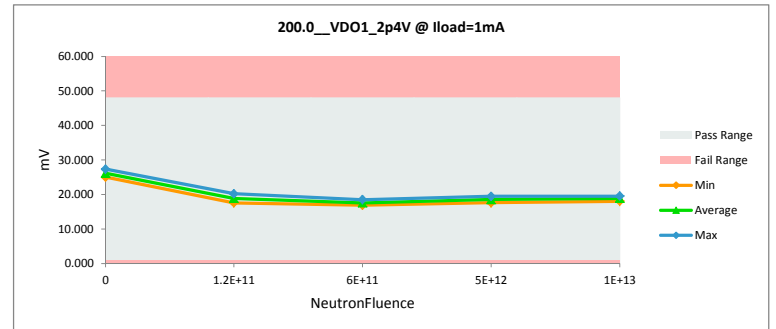
200.0_VDO1_2p4V @ Iload=1mA		
Test Site		
Tester		
Test Number		
Unit	mV	mV
Max Limit	48	48
Min Limit	1	1

NeutronFluence	Serial #	01152015_pre.txt	01112015_post.txt	Delta	Delta %	% of Limit Range
0	127	25.395	25.395	0.000	0.00%	0.00%
0	128	26.654	26.654	0.000	0.00%	0.00%
0	129	27.370	27.370	0.000	0.00%	0.00%
0	130	25.054	25.054	0.000	0.00%	0.00%
1.2E+11	131	26.574	19.203	7.371	27.74%	15.68%
1.2E+11	132	25.429	19.255	6.174	24.28%	13.14%
1.2E+11	133	25.765	18.209	7.556	29.33%	16.08%
1.2E+11	134	27.833	20.193	7.640	27.45%	16.26%
1.2E+11	135	25.641	17.570	8.071	31.48%	17.17%
6E+11	136	25.317	17.679	7.638	30.17%	16.25%
6E+11	137	26.511	18.498	8.013	30.23%	17.05%
6E+11	138	25.848	17.736	8.112	31.38%	17.26%
6E+11	139	24.677	17.144	7.533	30.53%	16.03%
6E+11	140	24.462	16.876	7.586	31.01%	16.14%
5E+12	141	26.555	18.460	8.095	30.48%	17.22%
0	142	26.318	26.318	0.000	0.00%	0.00%
5E+12	143	25.551	19.485	6.066	23.74%	12.91%
5E+12	144	27.250	17.610	9.640	35.38%	20.51%
5E+12	145	26.174	18.400	7.774	29.70%	16.54%
5E+12	146	25.738	18.650	7.088	27.54%	15.08%
1E+13	147	26.198	19.503	6.695	25.56%	14.24%
1E+13	148	26.710	19.156	7.554	28.28%	16.07%
1E+13	149	25.352	18.026	7.326	28.90%	15.59%
1E+13	150	25.535	18.176	7.359	28.82%	15.66%
1E+13	151	26.163	19.377	6.786	25.94%	14.44%
Max		27.833	27.370	9.640	35.38%	20.51%
Average		26.003	20.000	6.003	23.12%	12.77%
Min		24.462	16.876	0.000	0.00%	0.00%
Std Dev		0.819	3.263	3.139	12.05%	6.68%



200.0_VDO1_2p4V @ Iload=1mA		
Test Site		
Tester		
Test Number		
Max Limit	48	mV
Min Limit	1	mV

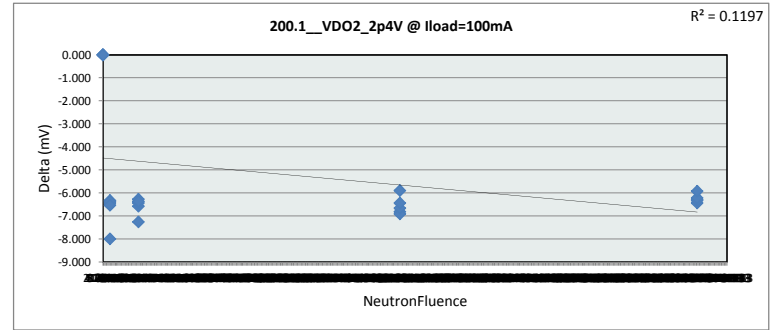
NeutronFluence	0	1.2E+11	6E+11	5E+12	1E+13
LL	1.000	1.000	1.000	1.000	1.000
Min	25.054	17.570	16.876	17.610	18.026
Average	26.158	18.886	17.587	18.521	18.848
Max	27.370	20.193	18.498	19.485	19.503
UL	48.000	48.000	48.000	48.000	48.000



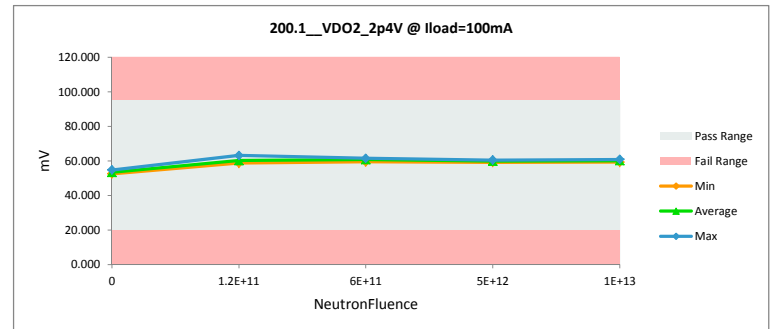
NDD Report
Device Name TPS7A4501

200.1_VDO2_2p4V @ Iload=100mA	
Test Site	
Tester	
Test Number	
Unit	mV mV
Max Limit	95 95
Min Limit	20 20

NeutronFluence	Serial #	01152015_pre.txt	01112015_post.txt	Delta	Delta %	% of Limit Range
0	127	53.594	53.594	0.000	0.00%	0.00%
0	128	52.548	52.548	0.000	0.00%	0.00%
0	129	52.474	52.474	0.000	0.00%	0.00%
0	130	54.728	54.728	0.000	0.00%	0.00%
1.2E+11	131	52.917	59.358	-6.441	-12.17%	8.59%
1.2E+11	132	55.171	63.167	-7.996	-14.49%	10.66%
1.2E+11	133	53.934	60.262	-6.328	-11.73%	8.44%
1.2E+11	134	52.351	58.731	-6.380	-12.19%	8.51%
1.2E+11	135	52.851	59.388	-6.537	-12.37%	8.72%
6E+11	136	52.864	59.444	-6.580	-12.45%	8.77%
6E+11	137	54.899	61.180	-6.281	-11.44%	8.37%
6E+11	138	53.596	60.866	-7.270	-13.56%	9.69%
6E+11	139	54.205	60.652	-6.447	-11.89%	8.60%
6E+11	140	55.049	61.419	-6.370	-11.57%	8.49%
5E+12	141	52.361	59.175	-6.814	-13.01%	9.09%
0	142	53.440	53.440	0.000	0.00%	0.00%
5E+12	143	53.605	59.510	-5.905	-11.02%	7.87%
5E+12	144	53.048	59.971	-6.923	-13.05%	9.23%
5E+12	145	53.805	60.477	-6.672	-12.40%	8.90%
5E+12	146	53.513	59.954	-6.441	-12.04%	8.59%
1E+13	147	53.735	60.024	-6.289	-11.70%	8.39%
1E+13	148	54.119	60.564	-6.445	-11.91%	8.59%
1E+13	149	54.523	60.852	-6.329	-11.61%	8.44%
1E+13	150	53.501	59.720	-6.219	-11.62%	8.29%
1E+13	151	53.326	59.257	-5.931	-11.12%	7.91%
Max		55.171	63.167	0.000	0.00%	10.66%
Average		53.606	58.830	-5.224	-9.73%	6.97%
Min		52.351	52.474	-7.996	-14.49%	0.00%
Std Dev		0.833	2.958	2.698	5.02%	3.60%



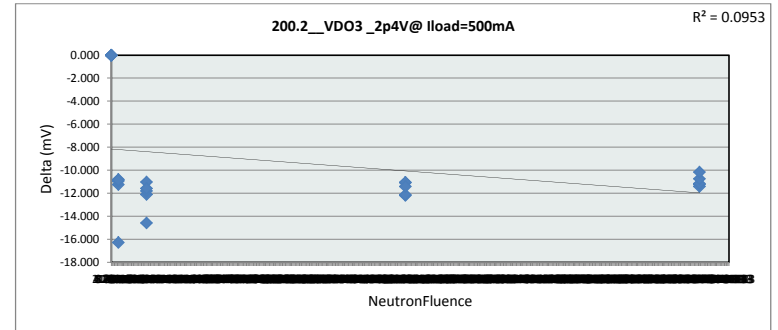
200.1_VDO2_2p4V @ Iload=100mA					
Test Site					
Tester					
Test Number					
Max Limit	95 mV				
Min Limit	20 mV				
NeutronFluence	0	1.2E+11	6E+11	5E+12	1E+13
LL	20.000	20.000	20.000	20.000	20.000
Min	52.474	58.731	59.444	59.175	59.257
Average	53.357	60.181	60.712	59.817	60.083
Max	54.728	63.167	61.419	60.477	60.852
UL	95.000	95.000	95.000	95.000	95.000



NDD Report
Device Name TPS7A4501

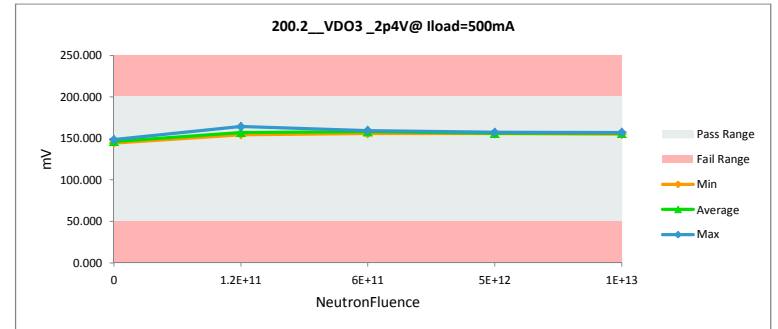
200.2_VDO3_2p4V@Iload=500mA	
Test Site	
Tester	
Test Number	
Unit	mV mV
Max Limit	200 200
Min Limit	50 50

NeutronFluence	Serial #	01152015_pre.txt	01112015_post.txt	Delta	Delta %	% of Limit Range
0	127	146.545	146.545	0.000	0.00%	0.00%
0	128	144.770	144.770	0.000	0.00%	0.00%
0	129	144.484	144.484	0.000	0.00%	0.00%
0	130	148.438	148.438	0.000	0.00%	0.00%
1.2E+11	131	144.174	155.418	-11.244	-7.80%	7.50%
1.2E+11	132	148.004	164.297	-16.293	-11.01%	10.86%
1.2E+11	133	145.761	156.716	-10.955	-7.52%	7.30%
1.2E+11	134	143.620	154.411	-10.791	-7.51%	7.19%
1.2E+11	135	144.034	154.894	-10.860	-7.54%	7.24%
6E+11	136	143.647	155.746	-12.099	-8.42%	8.07%
6E+11	137	147.581	158.597	-11.016	-7.46%	7.34%
6E+11	138	144.927	159.513	-14.586	-10.06%	9.72%
6E+11	139	145.922	157.739	-11.817	-8.10%	7.88%
6E+11	140	147.189	158.778	-11.589	-7.87%	7.73%
5E+12	141	143.561	155.743	-12.182	-8.49%	8.12%
0	142	147.360	147.360	0.000	0.00%	0.00%
5E+12	143	144.896	155.982	-11.086	-7.65%	7.39%
5E+12	144	144.674	155.717	-11.043	-7.63%	7.36%
5E+12	145	145.158	157.294	-12.136	-8.36%	8.09%
5E+12	146	144.854	156.271	-11.417	-7.88%	7.61%
1E+13	147	145.035	156.292	-11.257	-7.76%	7.50%
1E+13	148	145.675	157.092	-11.417	-7.84%	7.61%
1E+13	149	146.004	157.173	-11.169	-7.65%	7.45%
1E+13	150	144.558	155.301	-10.743	-7.43%	7.16%
1E+13	151	144.951	155.115	-10.164	-7.01%	6.78%
Max		148.438	164.297	0.000	0.00%	10.86%
Average		145.433	154.787	-9.355	-6.44%	6.24%
Min		143.561	144.484	-16.293	-11.01%	0.00%
Std Dev		1.393	4.797	4.935	3.39%	3.29%



200.2_VDO3_2p4V@Iload=500mA	
Test Site	
Tester	
Test Number	
Max Limit	200 mV
Min Limit	50 mV

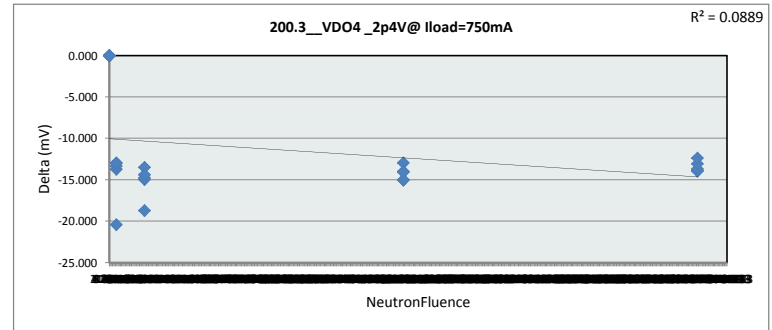
NeutronFluence	0	1.2E+11	6E+11	5E+12	1E+13
LL	50.000	50.000	50.000	50.000	50.000
Min	144.484	154.411	155.746	155.717	155.115
Average	146.319	157.147	158.075	156.201	156.195
Max	148.438	164.297	159.513	157.294	157.173
UL	200.000	200.000	200.000	200.000	200.000



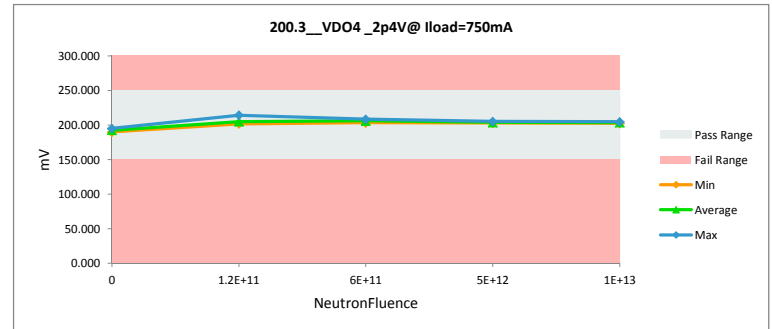
NDD Report
Device Name TPS7A4501

200.3_VDO4_2p4V@Iload=75		
Test Site		
Tester		
Test Number		
Unit	mV	mV
Max Limit	250	250
Min Limit	150	150

NeutronFluence	Serial #	01152015_pre.txt	01112015_post.txt	Delta	Delta %	% of Limit Range
0	127	192.416	192.416	0.000	0.00%	0.00%
0	128	190.229	190.229	0.000	0.00%	0.00%
0	129	189.773	189.773	0.000	0.00%	0.00%
0	130	194.783	194.783	0.000	0.00%	0.00%
1.2E+11	131	188.986	202.733	-13.747	-7.27%	13.75%
1.2E+11	132	193.608	214.006	-20.398	-10.54%	20.40%
1.2E+11	133	190.789	204.140	-13.351	-7.00%	13.35%
1.2E+11	134	188.543	201.542	-12.999	-6.89%	13.00%
1.2E+11	135	188.853	201.809	-12.956	-6.86%	12.96%
6E+11	136	188.210	203.168	-14.958	-7.95%	14.96%
6E+11	137	193.062	206.572	-13.510	-7.00%	13.51%
6E+11	138	189.642	208.361	-18.719	-9.87%	18.72%
6E+11	139	190.781	205.542	-14.761	-7.74%	14.76%
6E+11	140	192.270	206.663	-14.393	-7.49%	14.39%
5E+12	141	188.361	203.389	-15.028	-7.98%	15.03%
0	142	194.034	194.034	0.000	0.00%	0.00%
5E+12	143	189.526	203.604	-14.078	-7.43%	14.08%
5E+12	144	189.751	202.711	-12.960	-6.83%	12.96%
5E+12	145	189.943	204.963	-15.020	-7.91%	15.02%
5E+12	146	189.606	203.623	-14.017	-7.39%	14.02%
1E+13	147	189.774	203.612	-13.838	-7.29%	13.84%
1E+13	148	190.504	204.466	-13.962	-7.33%	13.96%
1E+13	149	190.735	204.413	-13.678	-7.17%	13.68%
1E+13	150	189.100	202.158	-13.058	-6.91%	13.06%
1E+13	151	189.951	202.316	-12.365	-6.51%	12.36%
Max		194.783	214.006	0.000	0.00%	20.40%
Average		190.529	202.041	-11.512	-6.05%	11.51%
Min		188.210	189.773	-20.398	-10.54%	0.00%
Std Dev		1.820	5.675	6.123	3.21%	6.12%



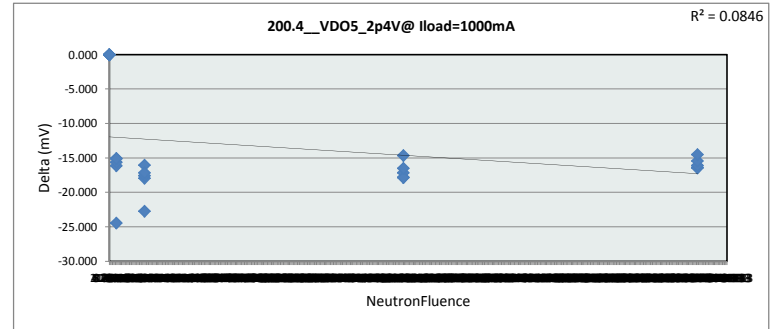
200.3_VDO4_2p4V@Iload=75					
Test Site					
Tester					
Test Number					
Max Limit	250		mV		
Min Limit	150		mV		
NeutronFluence	0	1.2E+11	6E+11	5E+12	1E+13
LL	150.000	150.000	150.000	150.000	150.000
Min	189.773	201.542	203.168	202.711	202.158
Average	192.247	204.846	206.061	203.658	203.393
Max	194.783	214.006	208.361	204.963	204.466
UL	250.000	250.000	250.000	250.000	250.000



NDD Report
Device Name TPS7A4501

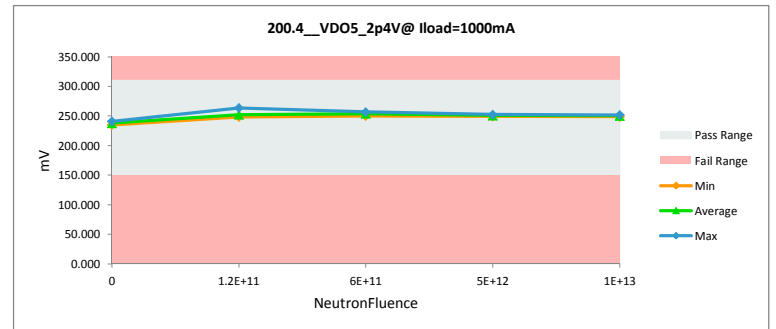
200.4_VDO5_2p4V@Iload=1000	
Test Site	
Tester	
Test Number	
Unit	mV mV
Max Limit	310 310
Min Limit	150 150

NeutronFluence	Serial #	01152015_pre.txt	01112015_post.txt	Delta	Delta %	% of Limit Range
0	127	238.161	238.161	0.000	0.00%	0.00%
0	128	235.445	235.445	0.000	0.00%	0.00%
0	129	234.863	234.863	0.000	0.00%	0.00%
0	130	240.862	240.862	0.000	0.00%	0.00%
1.2E+11	131	233.637	249.765	-16.128	-6.90%	10.08%
1.2E+11	132	239.087	263.536	-24.449	-10.23%	15.28%
1.2E+11	133	235.681	251.290	-15.609	-6.62%	9.76%
1.2E+11	134	233.349	248.419	-15.070	-6.46%	9.42%
1.2E+11	135	233.350	248.468	-15.118	-6.48%	9.45%
6E+11	136	232.253	250.192	-17.939	-7.72%	11.21%
6E+11	137	238.289	254.345	-16.056	-6.74%	10.03%
6E+11	138	234.197	256.937	-22.740	-9.71%	14.21%
6E+11	139	235.440	253.031	-17.591	-7.47%	10.99%
6E+11	140	237.162	254.300	-17.138	-7.23%	10.71%
5E+12	141	232.958	250.739	-17.781	-7.63%	11.11%
0	142	240.366	240.366	0.000	0.00%	0.00%
5E+12	143	233.940	251.074	-17.134	-7.32%	10.71%
5E+12	144	234.757	249.422	-14.665	-6.25%	9.17%
5E+12	145	234.610	252.469	-17.859	-7.61%	11.16%
5E+12	146	234.296	250.809	-16.513	-7.05%	10.32%
1E+13	147	234.414	250.790	-16.376	-6.99%	10.23%
1E+13	148	235.190	251.632	-16.442	-6.99%	10.28%
1E+13	149	235.285	251.382	-16.097	-6.84%	10.06%
1E+13	150	233.342	248.797	-15.455	-6.62%	9.66%
1E+13	151	234.854	249.353	-14.499	-6.17%	9.06%
Max		240.862	263.536	0.000	0.00%	15.28%
Average		235.432	249.058	-13.626	-5.80%	8.52%
Min		232.253	234.863	-24.449	-10.23%	0.00%
Std Dev		2.294	6.569	7.298	3.10%	4.56%



200.4_VDO5_2p4V@Iload=1000	
Test Site	
Tester	
Test Number	
Max Limit	310 mV
Min Limit	150 mV

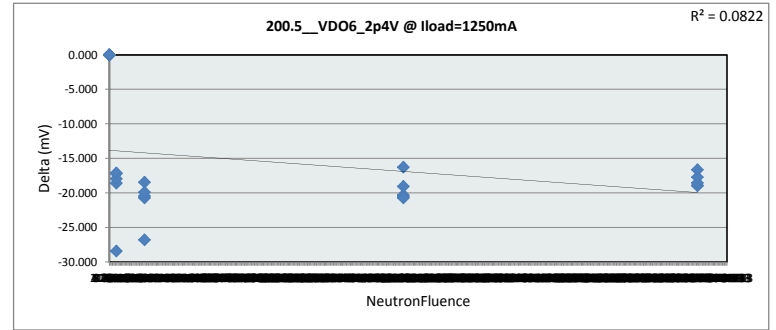
NeutronFluence	0	1.2E+11	6E+11	5E+12	1E+13
LL	150.000	150.000	150.000	150.000	150.000
Min	234.863	248.419	250.192	249.422	248.797
Average	237.939	252.296	253.761	250.903	250.391
Max	240.862	263.536	256.937	252.469	251.632
UL	310.000	310.000	310.000	310.000	310.000



NDD Report
Device Name TPS7A4501

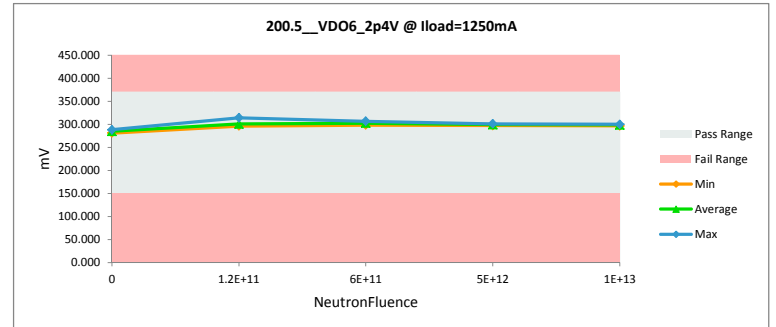
200.5_VDO6_2p4V @ Iload=1250mA	
Test Site	
Tester	
Test Number	
Unit	mV mV
Max Limit	370 370
Min Limit	150 150

NeutronFluence	Serial #	01152015_pre.txt	01112015_post.txt	Delta	Delta %	% of Limit Range
0	127	284.887	284.887	0.000	0.00%	0.00%
0	128	281.531	281.531	0.000	0.00%	0.00%
0	129	280.794	280.794	0.000	0.00%	0.00%
0	130	288.167	288.167	0.000	0.00%	0.00%
1.2E+11	131	279.189	297.778	-18.589	-6.66%	8.45%
1.2E+11	132	285.690	314.112	-28.422	-9.95%	12.92%
1.2E+11	133	281.436	299.374	-17.938	-6.37%	8.15%
1.2E+11	134	279.048	296.246	-17.198	-6.16%	7.82%
1.2E+11	135	278.874	296.015	-17.141	-6.15%	7.79%
6E+11	136	277.345	298.063	-20.718	-7.47%	9.42%
6E+11	137	284.690	303.151	-18.461	-6.48%	8.39%
6E+11	138	279.626	306.447	-26.821	-9.59%	12.19%
6E+11	139	280.962	301.420	-20.458	-7.28%	9.30%
6E+11	140	282.964	302.885	-19.921	-7.04%	9.06%
5E+12	141	278.454	299.018	-20.564	-7.39%	9.35%
0	142	287.778	287.778	0.000	0.00%	0.00%
5E+12	143	279.251	299.582	-20.331	-7.28%	9.24%
5E+12	144	280.749	297.040	-16.291	-5.80%	7.41%
5E+12	145	280.263	301.004	-20.741	-7.40%	9.43%
5E+12	146	279.932	299.014	-19.082	-6.82%	8.67%
1E+13	147	280.017	298.979	-18.962	-6.77%	8.62%
1E+13	148	280.783	299.728	-18.945	-6.75%	8.61%
1E+13	149	280.750	299.293	-18.543	-6.60%	8.43%
1E+13	150	278.621	296.345	-17.724	-6.36%	8.06%
1E+13	151	280.725	297.408	-16.683	-5.94%	7.58%
Max		288.167	314.112	0.000	0.00%	12.92%
Average		281.301	297.042	-15.741	-5.61%	7.16%
Min		277.345	280.794	-28.422	-9.95%	0.00%
Std Dev		2.851	7.480	8.479	3.02%	3.85%



200.5_VDO6_2p4V @ Iload=1250mA	
Test Site	
Tester	
Test Number	
Max Limit	370 mV
Min Limit	150 mV

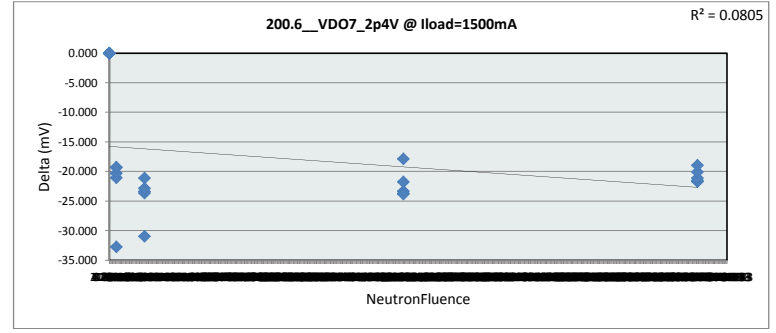
NeutronFluence	0	1.2E+11	6E+11	5E+12	1E+13
LL	150.000	150.000	150.000	150.000	150.000
Min	280.794	296.015	298.063	297.040	296.345
Average	284.631	300.705	302.393	299.132	298.351
Max	288.167	314.112	306.447	301.004	299.728
UL	370.000	370.000	370.000	370.000	370.000



NDD Report
Device Name TPS7A4501

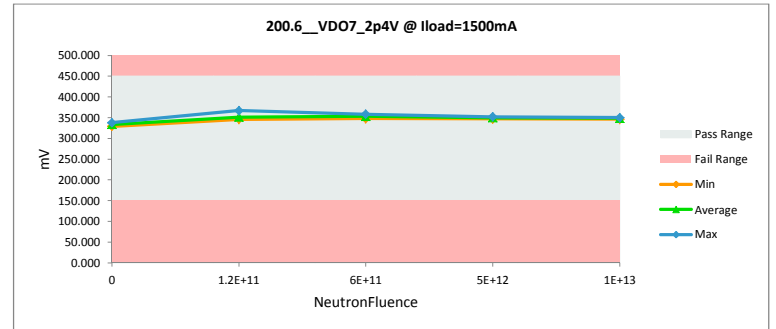
200.6_VDO7_2p4V @ Iload=1500mA		
Test Site		
Tester		
Test Number		
Unit	mV	mV
Max Limit	450	450
Min Limit	150	150

NeutronFluence	Serial #	01152015_pre.txt	01112015_post.txt	Delta	Delta %	% of Limit Range
0	127	333.775	333.775	0.000	0.00%	0.00%
0	128	329.790	329.790	0.000	0.00%	0.00%
0	129	328.871	328.871	0.000	0.00%	0.00%
0	130	337.744	337.744	0.000	0.00%	0.00%
1.2E+11	131	326.993	348.046	-21.053	-6.44%	7.02%
1.2E+11	132	334.505	367.256	-32.751	-9.79%	10.92%
1.2E+11	133	329.445	349.760	-20.315	-6.17%	6.77%
1.2E+11	134	327.019	346.344	-19.325	-5.91%	6.44%
1.2E+11	135	326.570	345.820	-19.250	-5.89%	6.42%
6E+11	136	324.415	348.054	-23.639	-7.29%	7.88%
6E+11	137	333.286	354.418	-21.132	-6.34%	7.04%
6E+11	138	327.325	358.287	-30.962	-9.46%	10.32%
6E+11	139	328.704	352.085	-23.381	-7.11%	7.79%
6E+11	140	330.987	353.831	-22.844	-6.90%	7.61%
5E+12	141	326.184	349.539	-23.355	-7.16%	7.79%
0	142	337.357	337.357	0.000	0.00%	0.00%
5E+12	143	326.804	350.513	-23.709	-7.25%	7.90%
5E+12	144	329.063	346.940	-17.877	-5.43%	5.96%
5E+12	145	328.205	352.002	-23.797	-7.25%	7.93%
5E+12	146	327.875	349.646	-21.771	-6.64%	7.26%
1E+13	147	327.901	349.613	-21.712	-6.62%	7.24%
1E+13	148	328.651	350.183	-21.532	-6.55%	7.18%
1E+13	149	328.438	349.569	-21.131	-6.43%	7.04%
1E+13	150	326.080	346.171	-20.091	-6.16%	6.70%
1E+13	151	328.868	347.842	-18.974	-5.77%	6.32%
Max		337.744	367.256	0.000	0.00%	10.92%
Average		329.394	347.338	-17.944	-5.46%	5.98%
Min		324.415	328.871	-32.751	-9.79%	0.00%
Std Dev		3.424	8.486	9.721	2.95%	3.24%



200.6_VDO7_2p4V @ Iload=1500mA		
Test Site		
Tester		
Test Number		
Max Limit	450	mV
Min Limit	150	mV

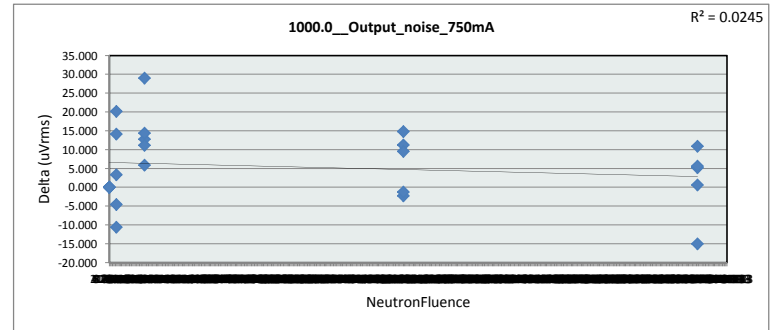
NeutronFluence	0	1.2E+11	6E+11	5E+12	1E+13
LL	150.000	150.000	150.000	150.000	150.000
Min	328.871	345.820	348.054	346.940	346.171
Average	333.507	351.445	353.335	349.728	348.676
Max	337.744	367.256	358.287	352.002	350.183
UL	450.000	450.000	450.000	450.000	450.000



NDD Report
Device Name TPS7A4501

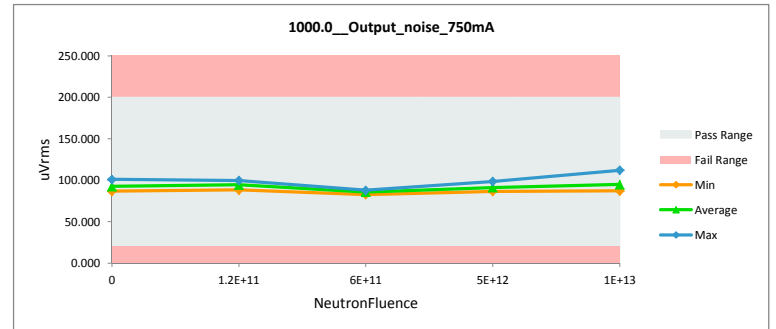
Test Site	1000.0_Output_noise_750mA	
Tester		
Test Number		
Unit	uVrms	uVrms
Max Limit	200	200
Min Limit	20	20

NeutronFluence	Serial #	01152015_pre.txt	01112015_post.txt	Delta	Delta %	% of Limit Range
0	127	101.135	101.135	0.000	0.00%	0.00%
0	128	94.268	94.268	0.000	0.00%	0.00%
0	129	89.716	89.716	0.000	0.00%	0.00%
0	130	90.672	90.672	0.000	0.00%	0.00%
1.2E+11	131	94.948	99.461	-4.513	-4.75%	2.51%
1.2E+11	132	89.029	99.628	-10.599	-11.91%	5.89%
1.2E+11	133	105.869	91.722	14.147	13.36%	7.86%
1.2E+11	134	108.459	88.322	20.137	18.57%	11.19%
1.2E+11	135	96.793	93.420	3.373	3.48%	1.87%
6E+11	136	100.750	87.992	12.758	12.66%	7.09%
6E+11	137	100.756	86.346	14.410	14.30%	8.01%
6E+11	138	96.478	85.312	11.166	11.57%	6.20%
6E+11	139	111.770	82.773	28.997	25.94%	16.11%
6E+11	140	92.204	86.341	5.863	6.36%	3.26%
5E+12	141	91.400	93.630	-2.230	-2.44%	1.24%
0	142	86.857	86.857	0.000	0.00%	0.00%
5E+12	143	97.362	98.630	-1.268	-1.30%	0.70%
5E+12	144	103.381	88.576	14.805	14.32%	8.23%
5E+12	145	97.781	86.512	11.269	11.52%	6.26%
5E+12	146	97.862	88.315	9.547	9.76%	5.30%
1E+13	147	96.985	111.973	-14.988	-15.45%	8.33%
1E+13	148	99.804	88.881	10.923	10.94%	6.07%
1E+13	149	87.728	87.126	0.602	0.69%	0.33%
1E+13	150	99.336	94.137	5.199	5.23%	2.89%
1E+13	151	97.796	92.181	5.615	5.74%	3.12%
Max		111.770	111.973	28.997	25.94%	16.11%
Average		97.166	91.757	5.409	5.14%	4.50%
Min		86.857	82.773	-14.988	-15.45%	0.00%
Std Dev		6.261	6.452	9.651	9.38%	4.13%



Test Site	1000.0_Output_noise_75	
Tester		
Test Number		
Max Limit	200	uVrms
Min Limit	20	uVrms

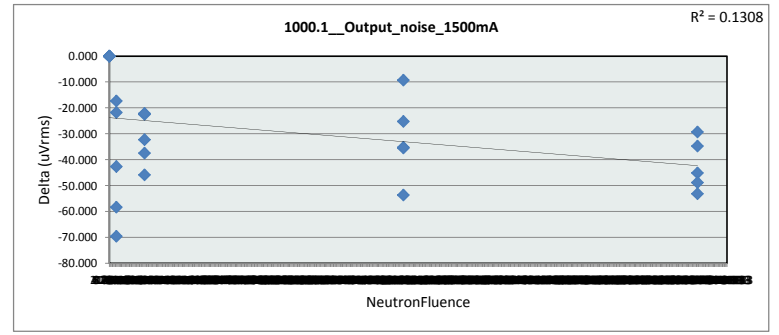
NeutronFluence	0	1.2E+11	6E+11	5E+12	1E+13
LL	20.000	20.000	20.000	20.000	20.000
Min	86.857	88.322	82.773	86.512	87.126
Average	92.530	94.511	85.753	91.133	94.860
Max	101.135	99.628	87.992	98.630	111.973
UL	200.000	200.000	200.000	200.000	200.000



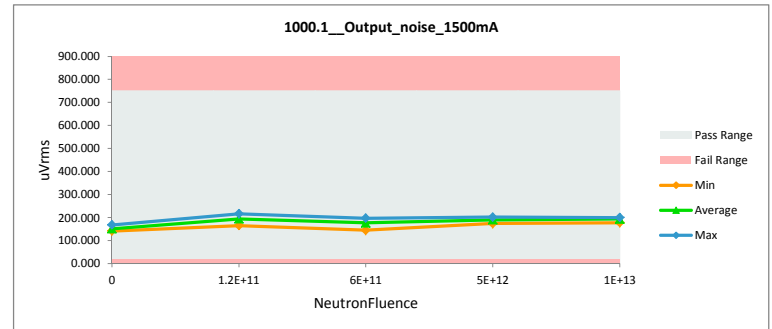
NDD Report
Device Name TPS7A4501

1000.1_Output_noise_1500mA		
Test Site		
Tester		
Test Number		
Unit	uVrms	uVrms
Max Limit	750	750
Min Limit	20	20

NeutronFluence	Serial #	01152015_pre.txt	01112015_post.txt	Delta	Delta %	% of Limit Range
0	127	150.432	150.432	0.000	0.00%	0.00%
0	128	141.079	141.079	0.000	0.00%	0.00%
0	129	167.519	167.519	0.000	0.00%	0.00%
0	130	146.257	146.257	0.000	0.00%	0.00%
1.2E+11	131	156.370	199.047	-42.677	-27.29%	5.85%
1.2E+11	132	146.535	216.235	-69.700	-47.57%	9.55%
1.2E+11	133	145.468	203.848	-58.380	-40.13%	8.00%
1.2E+11	134	163.610	185.444	-21.834	-13.35%	2.99%
1.2E+11	135	147.302	164.662	-17.360	-11.79%	2.38%
6E+11	136	122.189	144.748	-22.559	-18.46%	3.09%
6E+11	137	151.009	196.917	-45.908	-30.40%	6.29%
6E+11	138	155.601	187.866	-32.265	-20.74%	4.42%
6E+11	139	147.386	169.553	-22.167	-15.04%	3.04%
6E+11	140	146.308	183.839	-37.531	-25.65%	5.14%
5E+12	141	148.589	173.839	-25.250	-16.99%	3.46%
0	142	148.510	148.510	0.000	0.00%	0.00%
5E+12	143	156.341	191.919	-35.578	-22.76%	4.87%
5E+12	144	178.636	187.959	-9.323	-5.22%	1.28%
5E+12	145	159.055	194.384	-35.329	-22.21%	4.84%
5E+12	146	148.109	201.868	-53.759	-36.30%	7.36%
1E+13	147	149.476	194.675	-45.199	-30.24%	6.19%
1E+13	148	164.978	199.758	-34.780	-21.08%	4.76%
1E+13	149	141.243	194.455	-53.212	-37.67%	7.29%
1E+13	150	149.727	198.596	-48.869	-32.64%	6.69%
1E+13	151	148.245	177.613	-29.368	-19.81%	4.02%
Max		178.636	216.235	0.000	0.00%	9.55%
Average		151.199	180.841	-29.642	-19.81%	4.06%
Min		122.189	141.079	-69.700	-47.57%	0.00%
Std Dev		10.628	21.385	20.331	13.82%	2.79%



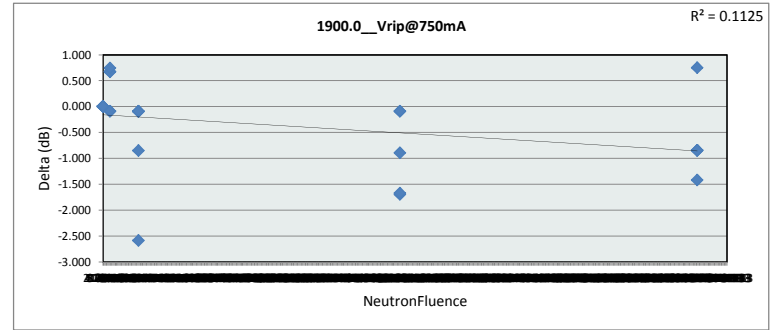
1000.1_Output_noise_1500mA					
Test Site					
Tester					
Test Number					
Max Limit	750	uVrms			
Min Limit	20	uVrms			
NeutronFluence	0	1.2E+11	6E+11	5E+12	1E+13
LL	20.000	20.000	20.000	20.000	20.000
Min	141.079	164.662	144.748	173.839	177.613
Average	150.759	193.847	176.585	189.994	193.019
Max	167.519	216.235	196.917	201.868	199.758
UL	750.000	750.000	750.000	750.000	750.000



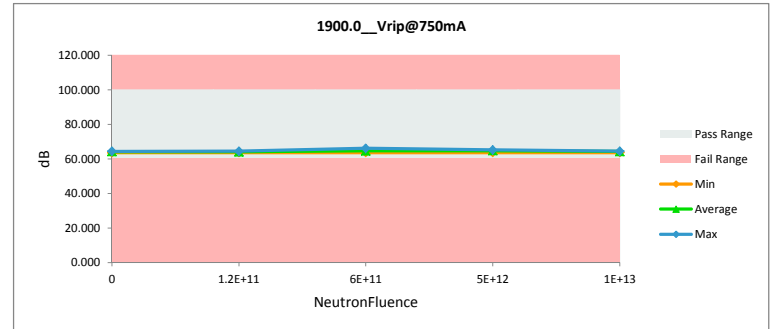
NDD Report
Device Name TPS7A4501

1900.0_Vrip@750mA		
Test Site		
Tester		
Test Number		
Unit	dB	dB
Max Limit	100	100
Min Limit	60.5	60.5

NeutronFluence	Serial #	01152015_pre.txt	01112015_post.txt	Delta	Delta %	% of Limit Range
0	127	63.529	63.529	0.000	0.00%	0.00%
0	128	64.274	64.274	0.000	0.00%	0.00%
0	129	64.267	64.267	0.000	0.00%	0.00%
0	130	64.295	64.295	0.000	0.00%	0.00%
1.2E+11	131	64.275	63.602	0.673	1.05%	1.70%
1.2E+11	132	64.290	64.378	-0.088	-0.14%	0.22%
1.2E+11	133	64.286	63.618	0.668	1.04%	1.69%
1.2E+11	134	65.094	64.349	0.745	1.14%	1.89%
1.2E+11	135	64.286	64.379	-0.093	-0.14%	0.24%
6E+11	136	64.289	64.378	-0.089	-0.14%	0.23%
6E+11	137	63.526	66.116	-2.590	-4.08%	6.56%
6E+11	138	64.283	64.380	-0.097	-0.15%	0.25%
6E+11	139	63.542	63.633	-0.091	-0.14%	0.23%
6E+11	140	63.543	64.392	-0.849	-1.34%	2.15%
5E+12	141	63.520	63.611	-0.091	-0.14%	0.23%
0	142	64.278	64.278	0.000	0.00%	0.00%
5E+12	143	64.288	65.184	-0.896	-1.39%	2.27%
5E+12	144	63.513	65.208	-1.695	-2.67%	4.29%
5E+12	145	64.282	64.375	-0.093	-0.14%	0.24%
5E+12	146	63.530	65.200	-1.670	-2.63%	4.23%
1E+13	147	65.110	64.363	0.747	1.15%	1.89%
1E+13	148	63.520	64.366	-0.846	-1.33%	2.14%
1E+13	149	63.534	64.383	-0.849	-1.34%	2.15%
1E+13	150	63.530	64.376	-0.846	-1.33%	2.14%
1E+13	151	62.187	63.605	-1.418	-2.28%	3.59%
Max		65.110	66.116	0.747	1.15%	6.56%
Average		63.963	64.342	-0.379	-0.60%	1.53%
Min		62.187	63.529	-2.590	-4.08%	0.00%
Std Dev		0.608	0.602	0.830	1.30%	1.71%



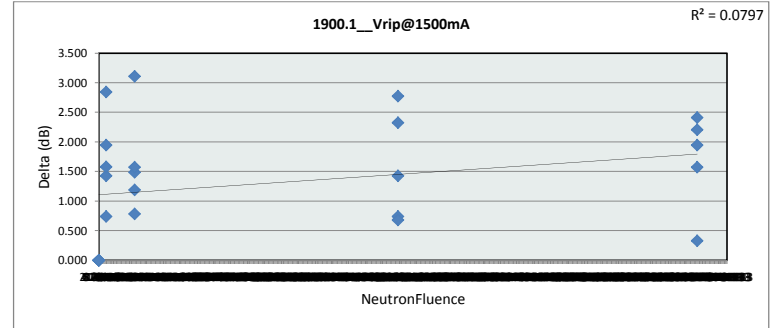
1900.0_Vrip@750mA					
Test Site					
Tester					
Test Number					
Max Limit	100	dB			
Min Limit	60.5	dB			
NeutronFluence	0	1.2E+11	6E+11	5E+12	1E+13
LL	60.500	60.500	60.500	60.500	60.500
Min	63.529	63.602	63.633	63.611	63.605
Average	64.129	64.065	64.580	64.716	64.219
Max	64.295	64.379	66.116	65.208	64.383
UL	100.000	100.000	100.000	100.000	100.000



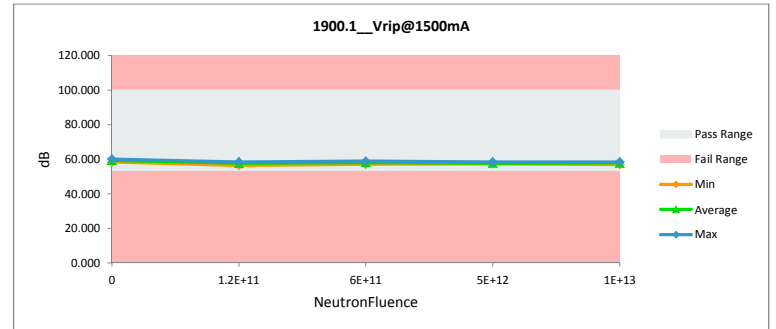
NDD Report
Device Name TPS7A4501

1900.1_Vrip@1500mA	
Test Site	
Tester	
Test Number	
Unit	dB
Max Limit	100
Min Limit	53

NeutronFluence	Serial #	01152015_pre.txt	01112015_post.txt	Delta	Delta %	% of Limit Range
0	127	59.616	59.616	0.000	0.00%	0.00%
0	128	60.074	60.074	0.000	0.00%	0.00%
0	129	59.154	59.154	0.000	0.00%	0.00%
0	130	59.627	59.627	0.000	0.00%	0.00%
1.2E+11	131	59.605	57.658	1.947	3.27%	4.14%
1.2E+11	132	59.176	56.334	2.842	4.80%	6.05%
1.2E+11	133	58.749	57.320	1.429	2.43%	3.04%
1.2E+11	134	59.598	58.018	1.580	2.65%	3.36%
1.2E+11	135	59.174	58.435	0.739	1.25%	1.57%
6E+11	136	59.623	58.842	0.781	1.31%	1.66%
6E+11	137	60.086	56.978	3.108	5.17%	6.61%
6E+11	138	59.171	57.683	1.488	2.51%	3.17%
6E+11	139	59.634	58.447	1.187	1.99%	2.53%
6E+11	140	59.632	58.060	1.572	2.64%	3.34%
5E+12	141	59.162	58.425	0.737	1.25%	1.57%
0	142	58.338	58.338	0.000	0.00%	0.00%
5E+12	143	59.619	57.297	2.322	3.89%	4.94%
5E+12	144	58.730	58.049	0.681	1.16%	1.45%
5E+12	145	58.745	57.317	1.428	2.43%	3.04%
5E+12	146	60.089	57.316	2.773	4.61%	5.90%
1E+13	147	59.169	56.965	2.204	3.72%	4.69%
1E+13	148	59.607	58.032	1.575	2.64%	3.35%
1E+13	149	60.093	57.682	2.411	4.01%	5.13%
1E+13	150	59.617	57.674	1.943	3.26%	4.13%
1E+13	151	58.744	58.417	0.327	0.56%	0.70%
Max		60.093	60.074	3.108	5.17%	6.61%
Average		59.393	58.070	1.323	2.22%	2.81%
Min		58.338	56.334	0.000	0.00%	0.00%
Std Dev		0.480	0.903	0.973	1.63%	2.07%



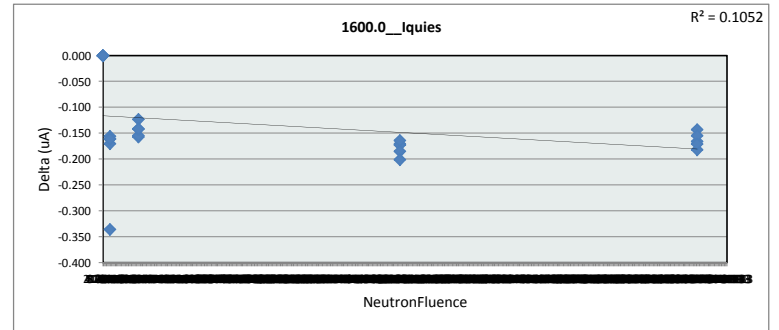
1900.1_Vrip@1500mA					
Test Site					
Tester					
Test Number					
Max Limit	100 dB				
Min Limit	53 dB				
NeutronFluence	0	1.2E+11	6E+11	5E+12	1E+13
LL	53.000	53.000	53.000	53.000	53.000
Min	58.338	56.334	56.978	57.297	56.965
Average	59.362	57.553	58.002	57.681	57.754
Max	60.074	58.435	58.842	58.425	58.417
UL	100.000	100.000	100.000	100.000	100.000



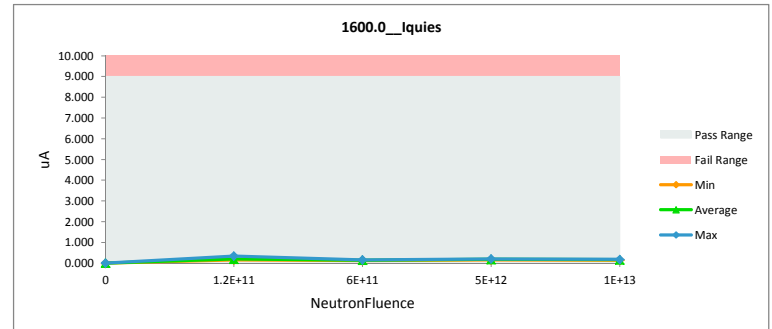
NDD Report
Device Name TPS7A4501

1600.0_Iquies		
Test Site		
Tester		
Test Number		
Unit	uA	uA
Max Limit	9	9
Min Limit	0	0

NeutronFluence	Serial #	01152015_pre.txt	01112015_post.txt	Delta	Delta %	% of Limit Range
0	127	0.004	0.004	0.000	0.00%	0.00%
0	128	0.001	0.001	0.000	0.00%	0.00%
0	129	0.004	0.004	0.000	0.00%	0.00%
0	130	0.006	0.006	0.000	0.00%	0.00%
1.2E+11	131	0.004	0.174	-0.170	-4250.00%	1.89%
1.2E+11	132	0.011	0.347	-0.336	-3054.55%	3.73%
1.2E+11	133	0.005	0.161	-0.156	-3120.00%	1.73%
1.2E+11	134	0.004	0.165	-0.161	-4025.00%	1.79%
1.2E+11	135	0.002	0.163	-0.161	-8050.00%	1.79%
6E+11	136	0.008	0.131	-0.123	-1537.50%	1.37%
6E+11	137	0.008	0.165	-0.157	-1962.50%	1.74%
6E+11	138	0.003	0.158	-0.155	-5166.67%	1.72%
6E+11	139	0.004	0.146	-0.142	-3550.00%	1.58%
6E+11	140	0.007	0.149	-0.142	-2028.57%	1.58%
5E+12	141	0.005	0.176	-0.171	-3420.00%	1.90%
0	142	0.011	0.011	0.000	0.00%	0.00%
5E+12	143	0.005	0.178	-0.173	-3460.00%	1.92%
5E+12	144	0.002	0.166	-0.164	-8200.00%	1.82%
5E+12	145	0.007	0.192	-0.185	-2642.86%	2.06%
5E+12	146	0.007	0.208	-0.201	-2871.43%	2.23%
1E+13	147	0.005	0.187	-0.182	-3640.00%	2.02%
1E+13	148	0.004	0.170	-0.166	-4150.00%	1.84%
1E+13	149	0.007	0.150	-0.143	-2042.86%	1.59%
1E+13	150	0.004	0.159	-0.155	-3875.00%	1.72%
1E+13	151	0.005	0.176	-0.171	-3420.00%	1.90%
Max		0.011	0.347	0.000	0.00%	3.73%
Average		0.005	0.142	-0.137	-2978.68%	1.52%
Min		0.001	0.001	-0.336	-8200.00%	0.00%
Std Dev		0.002	0.080	0.079	2174.09%	0.88%



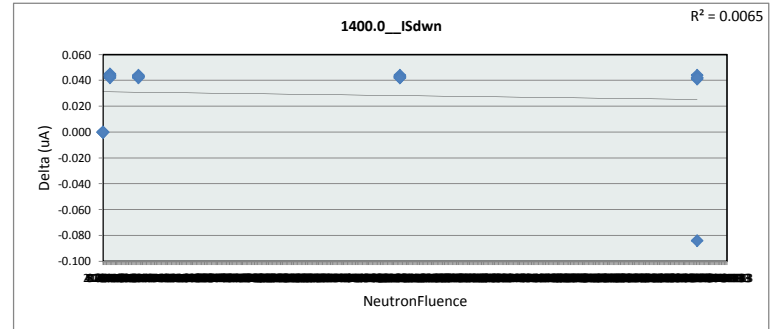
1600.0_Iquies					
Test Site					
Tester					
Test Number					
Max Limit	9	uA			
Min Limit	0	uA			
NeutronFluence	0	1.2E+11	6E+11	5E+12	1E+13
LL	0.000	0.000	0.000	0.000	0.000
Min	0.001	0.161	0.131	0.166	0.150
Average	0.005	0.202	0.150	0.184	0.168
Max	0.011	0.347	0.165	0.208	0.187
UL	9.000	9.000	9.000	9.000	9.000



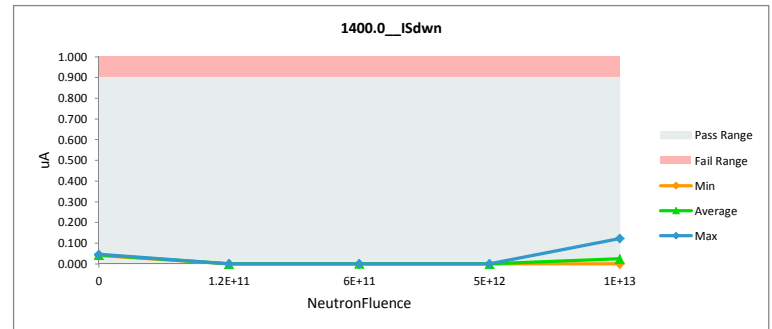
NDD Report
Device Name TPS7A4501

1400.0_I Sdwn		
Test Site		
Tester		
Test Number		
Unit	uA	uA
Max Limit	0.9	0.9
Min Limit	0	0

NeutronFluence	Serial #	01152015_pre.txt	01112015_post.txt	Delta	Delta %	% of Limit Range
0	127	0.045	0.045	0.000	0.00%	0.00%
0	128	0.041	0.041	0.000	0.00%	0.00%
0	129	0.041	0.041	0.000	0.00%	0.00%
0	130	0.043	0.043	0.000	0.00%	0.00%
1.2E+11	131	0.044	0.000	0.044	100.00%	4.89%
1.2E+11	132	0.046	0.001	0.045	97.83%	5.00%
1.2E+11	133	0.044	0.000	0.044	100.00%	4.89%
1.2E+11	134	0.042	0.000	0.042	100.00%	4.67%
1.2E+11	135	0.043	0.000	0.043	100.00%	4.78%
6E+11	136	0.044	0.000	0.044	100.00%	4.89%
6E+11	137	0.043	0.000	0.043	100.00%	4.78%
6E+11	138	0.043	0.001	0.042	97.67%	4.67%
6E+11	139	0.044	0.001	0.043	97.73%	4.78%
6E+11	140	0.044	0.001	0.043	97.73%	4.78%
5E+12	141	0.043	0.000	0.043	100.00%	4.78%
0	142	0.046	0.046	0.000	0.00%	0.00%
5E+12	143	0.044	0.000	0.044	100.00%	4.89%
5E+12	144	0.043	0.000	0.043	100.00%	4.78%
5E+12	145	0.043	0.001	0.042	97.67%	4.67%
5E+12	146	0.042	0.000	0.042	100.00%	4.67%
1E+13	147	0.044	0.000	0.044	100.00%	4.89%
1E+13	148	0.041	0.000	0.041	100.00%	4.56%
1E+13	149	0.042	0.000	0.042	100.00%	4.67%
1E+13	150	0.043	0.001	0.042	97.67%	4.67%
1E+13	151	0.039	0.123	-0.084	-215.38%	9.33%
Max		0.046	0.123	0.045	100.00%	9.33%
Average		0.043	0.014	0.029	66.84%	4.00%
Min		0.039	0.000	-0.084	-215.38%	0.00%
Std Dev		0.002	0.029	0.029	71.30%	2.24%



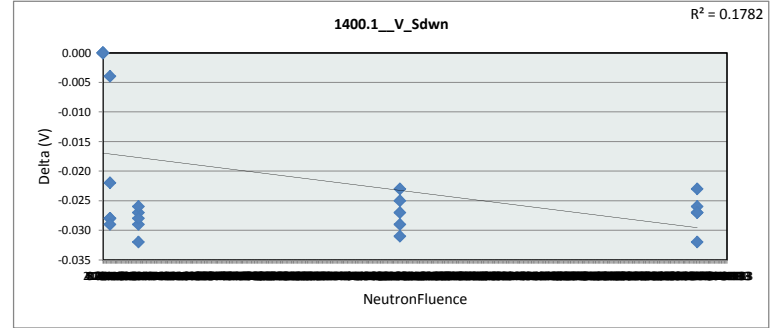
1400.0_I Sdwn					
Test Site					
Tester					
Test Number					
Max Limit	0.9		uA		
Min Limit	0		uA		
NeutronFluence	0	1.2E+11	6E+11	5E+12	1E+13
LL	0.000	0.000	0.000	0.000	0.000
Min	0.041	0.000	0.000	0.000	0.000
Average	0.043	0.000	0.001	0.000	0.025
Max	0.046	0.001	0.001	0.001	0.123
UL	0.900	0.900	0.900	0.900	0.900



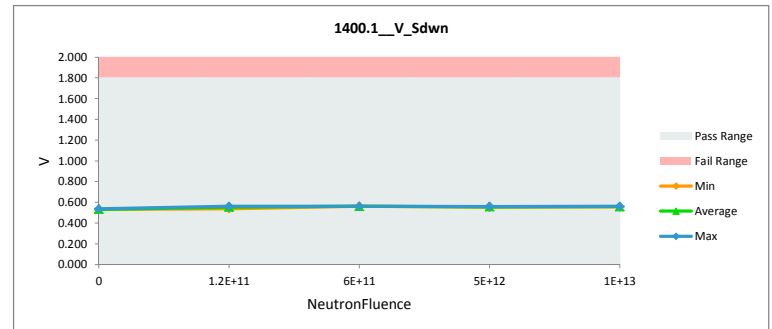
NDD Report
Device Name TPS7A4501

1400.1_V_Sdwn		
Test Site		
Tester		
Test Number		
Unit	V	V
Max Limit	1.8	1.8
Min Limit	0	0

NeutronFluence	Serial #	01152015_pre.txt	01112015_post.txt	Delta	Delta %	% of Limit Range
0	127	0.530	0.530	0.000	0.00%	0.00%
0	128	0.531	0.531	0.000	0.00%	0.00%
0	129	0.532	0.532	0.000	0.00%	0.00%
0	130	0.530	0.530	0.000	0.00%	0.00%
1.2E+11	131	0.532	0.554	-0.022	-4.14%	1.22%
1.2E+11	132	0.535	0.539	-0.004	-0.75%	0.22%
1.2E+11	133	0.533	0.561	-0.028	-5.25%	1.56%
1.2E+11	134	0.530	0.558	-0.028	-5.28%	1.56%
1.2E+11	135	0.532	0.561	-0.029	-5.45%	1.61%
6E+11	136	0.534	0.561	-0.027	-5.06%	1.50%
6E+11	137	0.529	0.561	-0.032	-6.05%	1.78%
6E+11	138	0.532	0.561	-0.029	-5.45%	1.61%
6E+11	139	0.533	0.561	-0.028	-5.25%	1.56%
6E+11	140	0.535	0.561	-0.026	-4.86%	1.44%
5E+12	141	0.529	0.554	-0.025	-4.73%	1.39%
0	142	0.537	0.537	0.000	0.00%	0.00%
5E+12	143	0.529	0.558	-0.029	-5.48%	1.61%
5E+12	144	0.529	0.560	-0.031	-5.86%	1.72%
5E+12	145	0.531	0.558	-0.027	-5.08%	1.50%
5E+12	146	0.530	0.553	-0.023	-4.34%	1.28%
1E+13	147	0.534	0.557	-0.023	-4.31%	1.28%
1E+13	148	0.531	0.558	-0.027	-5.08%	1.50%
1E+13	149	0.536	0.562	-0.026	-4.85%	1.44%
1E+13	150	0.529	0.561	-0.032	-6.05%	1.78%
1E+13	151	0.529	0.556	-0.027	-5.10%	1.50%
Max		0.537	0.562	0.000	0.00%	1.78%
Average		0.532	0.553	-0.021	-3.94%	1.16%
Min		0.529	0.530	-0.032	-6.05%	0.00%
Std Dev		0.002	0.012	0.012	2.24%	0.66%



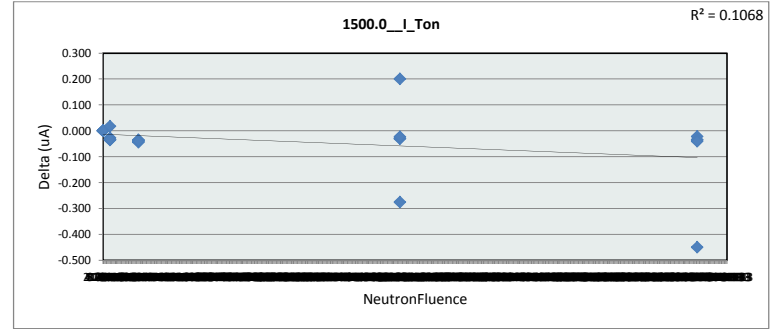
1400.1_V_Sdwn					
Test Site					
Tester					
Test Number					
Max Limit	1.8	V			
Min Limit	0	V			
NeutronFluence	0	1.2E+11	6E+11	5E+12	1E+13
LL	0.000	0.000	0.000	0.000	0.000
Min	0.530	0.539	0.561	0.553	0.556
Average	0.532	0.555	0.561	0.557	0.559
Max	0.537	0.561	0.561	0.560	0.562
UL	1.800	1.800	1.800	1.800	1.800



NDD Report
Device Name TPS7A4501

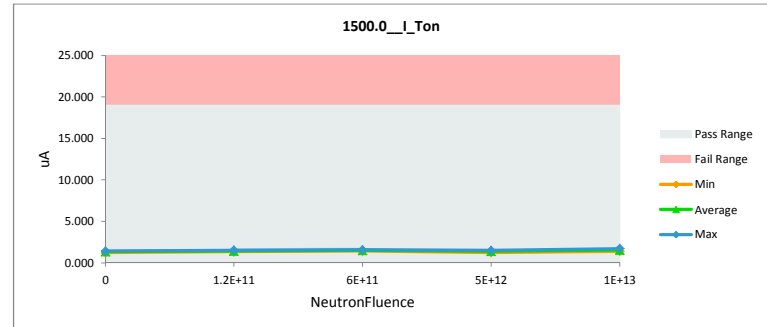
1500.0_I_Ton	
Test Site	
Tester	
Test Number	
Unit	uA uA
Max Limit	19 19
Min Limit	0 0

NeutronFluence	Serial #	01152015_pre.txt	01112015_post.txt	Delta	Delta %	% of Limit Range
0	127	1.362	1.362	0.000	0.00%	0.00%
0	128	1.427	1.427	0.000	0.00%	0.00%
0	129	1.293	1.293	0.000	0.00%	0.00%
0	130	1.238	1.238	0.000	0.00%	0.00%
1.2E+11	131	1.363	1.390	-0.027	-1.98%	0.14%
1.2E+11	132	1.486	1.468	0.018	1.21%	0.09%
1.2E+11	133	1.494	1.529	-0.035	-2.34%	0.18%
1.2E+11	134	1.312	1.346	-0.034	-2.59%	0.18%
1.2E+11	135	1.411	1.444	-0.033	-2.34%	0.17%
6E+11	136	1.414	1.452	-0.038	-2.69%	0.20%
6E+11	137	1.479	1.523	-0.044	-2.97%	0.23%
6E+11	138	1.470	1.506	-0.036	-2.45%	0.19%
6E+11	139	1.394	1.429	-0.035	-2.51%	0.18%
6E+11	140	1.551	1.591	-0.040	-2.58%	0.21%
5E+12	141	1.381	1.411	-0.030	-2.17%	0.16%
0	142	1.428	1.428	0.000	0.00%	0.00%
5E+12	143	1.461	1.260	0.201	13.76%	1.06%
5E+12	144	1.227	1.502	-0.275	-22.41%	1.45%
5E+12	145	1.341	1.370	-0.029	-2.16%	0.15%
5E+12	146	1.357	1.380	-0.023	-1.69%	0.12%
1E+13	147	1.384	1.406	-0.022	-1.59%	0.12%
1E+13	148	1.557	1.591	-0.034	-2.18%	0.18%
1E+13	149	1.521	1.556	-0.035	-2.30%	0.18%
1E+13	150	1.432	1.473	-0.041	-2.86%	0.22%
1E+13	151	1.259	1.709	-0.450	-35.74%	2.37%
Max		1.557	1.709	0.201	13.76%	2.37%
Average		1.402	1.443	-0.042	-3.22%	0.31%
Min		1.227	1.238	-0.450	-35.74%	0.00%
Std Dev		0.091	0.108	0.111	8.66%	0.54%



1500.0_I_Ton	
Test Site	
Tester	
Test Number	
Max Limit	19 uA
Min Limit	0 uA

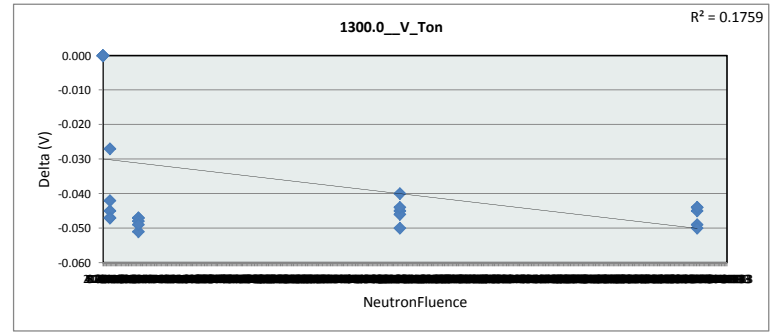
NeutronFluence	0	1.2E+11	6E+11	5E+12	1E+13
LL	0.000	0.000	0.000	0.000	0.000
Min	1.238	1.346	1.429	1.260	1.406
Average	1.350	1.435	1.500	1.385	1.547
Max	1.428	1.529	1.591	1.502	1.709
UL	19.000	19.000	19.000	19.000	19.000



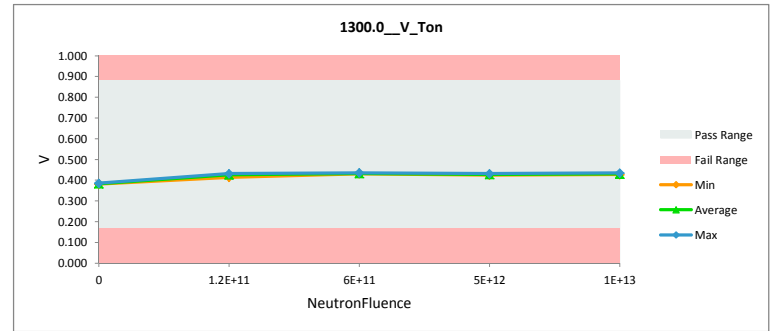
NDD Report
Device Name TPS7A4501

1300.0_V_Ton		
Test Site		
Tester		
Test Number		
Unit	V	V
Max Limit	0.88	0.88
Min Limit	0.17	0.17

NeutronFluence	Serial #	01152015_pre.txt	01112015_post.txt	Delta	Delta %	% of Limit Range
0	127	0.383	0.383	0.000	0.00%	0.00%
0	128	0.382	0.382	0.000	0.00%	0.00%
0	129	0.383	0.383	0.000	0.00%	0.00%
0	130	0.383	0.383	0.000	0.00%	0.00%
1.2E+11	131	0.385	0.427	-0.042	-10.91%	5.92%
1.2E+11	132	0.387	0.414	-0.027	-6.98%	3.80%
1.2E+11	133	0.385	0.432	-0.047	-12.21%	6.62%
1.2E+11	134	0.384	0.429	-0.045	-11.72%	6.34%
1.2E+11	135	0.385	0.432	-0.047	-12.21%	6.62%
6E+11	136	0.384	0.431	-0.047	-12.24%	6.62%
6E+11	137	0.382	0.433	-0.051	-13.35%	7.18%
6E+11	138	0.385	0.432	-0.047	-12.21%	6.62%
6E+11	139	0.384	0.432	-0.048	-12.50%	6.76%
6E+11	140	0.387	0.436	-0.049	-12.66%	6.90%
5E+12	141	0.382	0.427	-0.045	-11.78%	6.34%
0	142	0.386	0.386	0.000	0.00%	0.00%
5E+12	143	0.383	0.429	-0.046	-12.01%	6.48%
5E+12	144	0.382	0.432	-0.050	-13.09%	7.04%
5E+12	145	0.385	0.429	-0.044	-11.43%	6.20%
5E+12	146	0.385	0.425	-0.040	-10.39%	5.63%
1E+13	147	0.385	0.429	-0.044	-11.43%	6.20%
1E+13	148	0.384	0.429	-0.045	-11.72%	6.34%
1E+13	149	0.386	0.435	-0.049	-12.69%	6.90%
1E+13	150	0.383	0.433	-0.050	-13.05%	7.04%
1E+13	151	0.383	0.427	-0.044	-11.49%	6.20%
Max		0.387	0.436	0.000	0.00%	7.18%
Average		0.384	0.420	-0.036	-9.44%	5.11%
Min		0.382	0.382	-0.051	-13.35%	0.00%
Std Dev		0.002	0.019	0.019	4.97%	2.69%



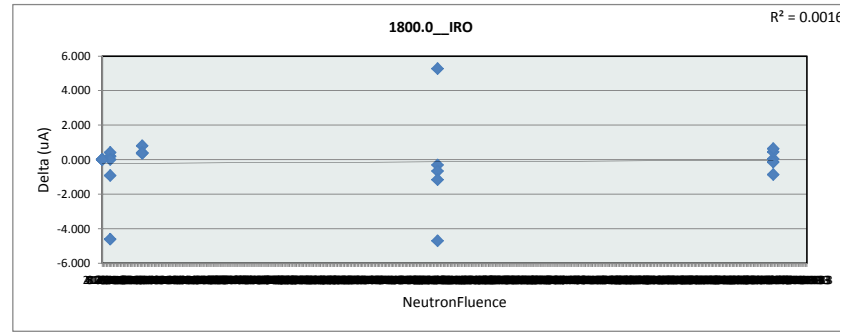
1300.0_V_Ton					
Test Site					
Tester					
Test Number					
Max Limit	0.88	V			
Min Limit	0.17	V			
NeutronFluence	0	1.2E+11	6E+11	5E+12	1E+13
LL	0.170	0.170	0.170	0.170	0.170
Min	0.382	0.414	0.431	0.425	0.427
Average	0.383	0.427	0.433	0.428	0.431
Max	0.386	0.432	0.436	0.432	0.435
UL	0.880	0.880	0.880	0.880	0.880



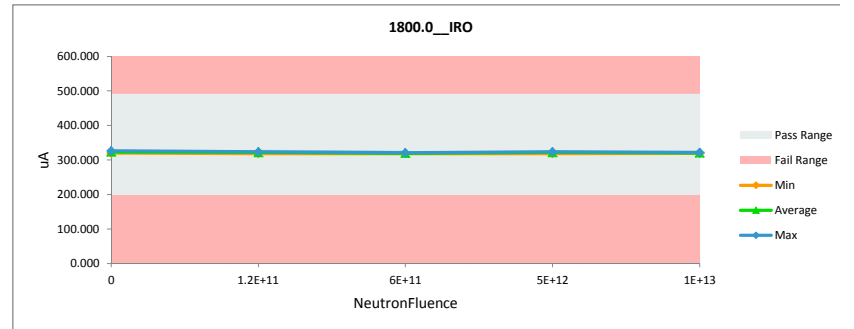
NDD Report
Device Name TPS7A4501

1800.0_IRO	
Test Site	
Tester	
Test Number	
Unit	uA uA
Max Limit	490 490
Min Limit	200 200

NeutronFluence	Serial #	01152015_pre.txt	01112015_post.txt	Delta	Delta %	% of Limit Range
0	127	322.881	322.881	0.000	0.00%	0.00%
0	128	324.811	324.811	0.000	0.00%	0.00%
0	129	326.306	326.306	0.000	0.00%	0.00%
0	130	321.110	321.110	0.000	0.00%	0.00%
1.2E+11	131	320.887	321.813	-0.926	-0.29%	0.32%
1.2E+11	132	319.114	323.728	-4.614	-1.45%	1.59%
1.2E+11	133	318.687	318.507	0.180	0.06%	0.06%
1.2E+11	134	323.186	322.781	0.405	0.13%	0.14%
1.2E+11	135	320.976	320.966	0.010	0.00%	0.00%
6E+11	136	321.018	320.650	0.368	0.11%	0.13%
6E+11	137	321.556	320.759	0.797	0.25%	0.27%
6E+11	138	319.290	318.892	0.398	0.12%	0.14%
6E+11	139	318.931	318.552	0.379	0.12%	0.13%
6E+11	140	319.202	318.833	0.369	0.12%	0.13%
5E+12	141	323.234	323.549	-0.315	-0.10%	0.11%
0	142	319.875	319.875	0.000	0.00%	0.00%
5E+12	143	318.896	323.605	-4.709	-1.48%	1.62%
5E+12	144	323.614	318.349	5.265	1.63%	1.82%
5E+12	145	320.274	320.937	-0.663	-0.21%	0.23%
5E+12	146	320.632	321.797	-1.165	-0.36%	0.40%
1E+13	147	320.534	321.404	-0.870	-0.27%	0.30%
1E+13	148	320.336	320.291	0.045	0.01%	0.02%
1E+13	149	319.321	318.872	0.449	0.14%	0.15%
1E+13	150	319.851	319.224	0.627	0.20%	0.22%
1E+13	151	321.610	321.760	-0.150	-0.05%	0.05%
Max		326.306	326.306	5.265	1.63%	1.82%
Average		321.045	321.210	-0.165	-0.05%	0.31%
Min		318.687	318.349	-4.709	-1.48%	0.00%
Std Dev		1.979	2.132	1.780	0.55%	0.53%



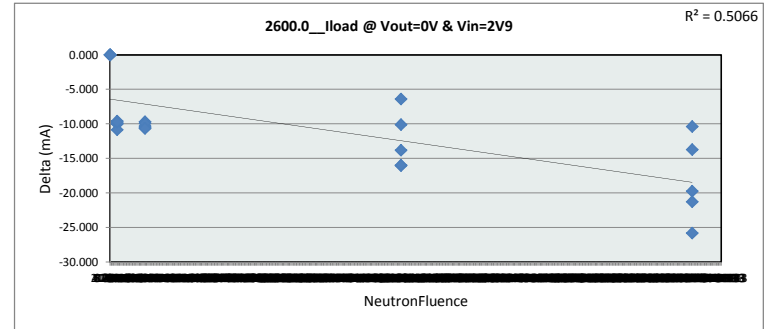
1800.0_IRO		0	1.2E+11	6E+11	5E+12	1E+13
Test Site						
Tester						
Test Number						
Max Limit	490 uA					
Min Limit	200 uA					
NeutronFluence		0	1.2E+11	6E+11	5E+12	1E+13
LL		200.000	200.000	200.000	200.000	200.000
Min		319.875	318.507	318.552	318.349	318.872
Average		322.997	321.559	319.537	321.647	320.310
Max		326.306	323.728	320.759	323.605	321.760
UL		490.000	490.000	490.000	490.000	490.000



NDD Report
Device Name TPS7A4501

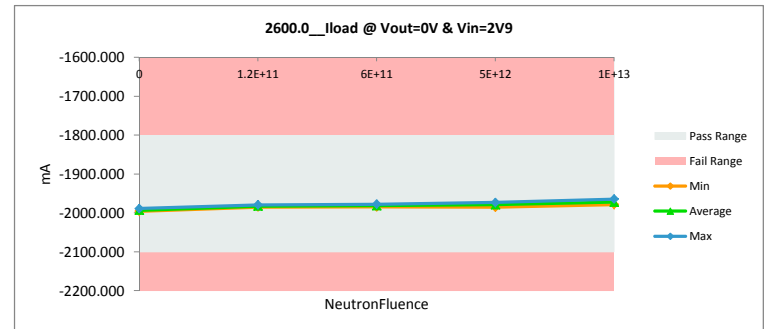
2600.0_ Iload @ Vout=0V & Vin=2V9		
Test Site		
Tester		
Test Number		
Unit	mA	mA
Max Limit	-1800	-1800
Min Limit	-2100	-2100

NeutronFluence	Serial #	01152015_pre.txt	01112015_post.txt	Delta	Delta %	% of Limit Range
0	127	-1994.572	-1994.572	0.000	0.00%	0.00%
0	128	-1995.748	-1995.748	0.000	0.00%	0.00%
0	129	-1994.295	-1994.295	0.000	0.00%	0.00%
0	130	-1988.873	-1988.873	0.000	0.00%	0.00%
1.2E+11	131	-1993.007	-1983.395	-9.612	0.48%	3.20%
1.2E+11	132	-1989.346	-1979.422	-9.924	0.50%	3.31%
1.2E+11	133	-1992.626	-1982.586	-10.040	0.50%	3.35%
1.2E+11	134	-1992.816	-1981.947	-10.869	0.55%	3.62%
1.2E+11	135	-1994.761	-1985.013	-9.748	0.49%	3.25%
6E+11	136	-1994.623	-1984.894	-9.729	0.49%	3.24%
6E+11	137	-1988.193	-1977.614	-10.579	0.53%	3.53%
6E+11	138	-1993.207	-1982.858	-10.349	0.52%	3.45%
6E+11	139	-1991.853	-1981.892	-9.961	0.50%	3.32%
6E+11	140	-1990.386	-1979.691	-10.695	0.54%	3.56%
5E+12	141	-1995.547	-1985.398	-10.149	0.51%	3.38%
0	142	-1994.141	-1994.141	0.000	0.00%	0.00%
5E+12	143	-1993.407	-1977.364	-16.043	0.80%	5.35%
5E+12	144	-1989.554	-1983.158	-6.396	0.32%	2.13%
5E+12	145	-1989.044	-1973.051	-15.993	0.80%	5.33%
5E+12	146	-1989.558	-1975.713	-13.845	0.70%	4.61%
1E+13	147	-1988.786	-1978.376	-10.410	0.52%	3.47%
1E+13	148	-1990.729	-1976.992	-13.737	0.69%	4.58%
1E+13	149	-1990.259	-1970.497	-19.762	0.99%	6.59%
1E+13	150	-1993.561	-1972.265	-21.296	1.07%	7.10%
1E+13	151	-1990.354	-1964.518	-25.836	1.30%	8.61%
Max		-1988.193	-1964.518	0.000	1.30%	8.61%
Average		-1991.970	-1981.771	-10.199	0.51%	3.40%
Min		-1995.748	-1995.748	-25.836	0.00%	0.00%
Std Dev		2.396	7.821	6.736	0.34%	2.25%



2600.0_ Iload @ Vout=0V		
Test Site		
Tester		
Test Number		
Max Limit	-1800	mA
Min Limit	-2100	mA

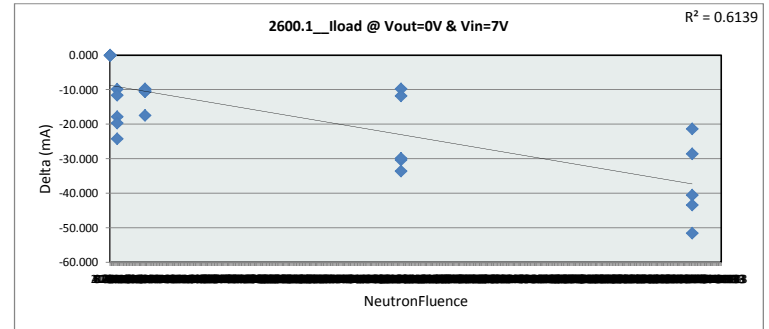
NeutronFluence	0	1.2E+11	6E+11	5E+12	1E+13
LL	-2100.000	-2100.000	-2100.000	-2100.000	-2100.000
Min	-1995.748	-1985.013	-1984.894	-1985.398	-1978.376
Average	-1993.526	-1982.473	-1981.390	-1978.937	-1972.530
Max	-1988.873	-1979.422	-1977.614	-1973.051	-1964.518
UL	-1800.000	-1800.000	-1800.000	-1800.000	-1800.000



NDD Report
Device Name TPS7A4501

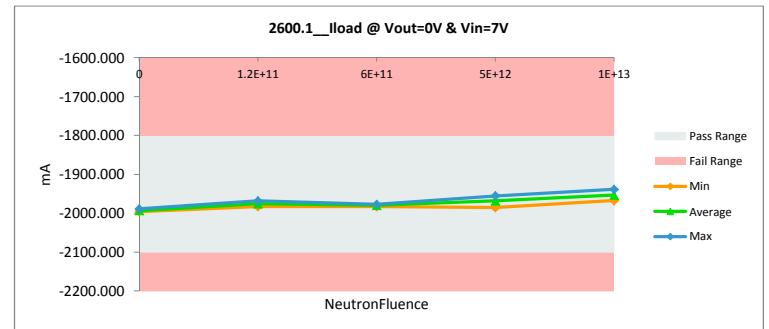
2600.1_load @ Vout=0V & Vin=7V		
Test Site		
Tester		
Test Number		
Unit	mA	mA
Max Limit	-1800	-1800
Min Limit	-2100	-2100

NeutronFluence	Serial #	01152015_pre.txt	01112015_post.txt	Delta	Delta %	% of Limit Range
0	127	-1994.564	-1994.564	0.000	0.00%	0.00%
0	128	-1995.735	-1995.735	0.000	0.00%	0.00%
0	129	-1994.263	-1994.263	0.000	0.00%	0.00%
0	130	-1988.906	-1988.906	0.000	0.00%	0.00%
1.2E+11	131	-1992.985	-1975.179	-17.806	0.89%	5.94%
1.2E+11	132	-1989.392	-1979.539	-9.853	0.50%	3.28%
1.2E+11	133	-1992.602	-1972.890	-19.712	0.99%	6.57%
1.2E+11	134	-1992.719	-1968.434	-24.285	1.22%	8.10%
1.2E+11	135	-1994.746	-1983.138	-11.608	0.58%	3.87%
6E+11	136	-1994.682	-1977.201	-17.481	0.88%	5.83%
6E+11	137	-1988.246	-1977.639	-10.607	0.53%	3.54%
6E+11	138	-1993.169	-1983.023	-10.146	0.51%	3.38%
6E+11	139	-1991.831	-1982.067	-9.764	0.49%	3.25%
6E+11	140	-1990.404	-1979.920	-10.484	0.53%	3.49%
5E+12	141	-1995.242	-1985.487	-9.755	0.49%	3.25%
0	142	-1994.086	-1994.086	0.000	0.00%	0.00%
5E+12	143	-1993.358	-1963.037	-30.321	1.52%	10.11%
5E+12	144	-1989.453	-1977.642	-11.811	0.59%	3.94%
5E+12	145	-1988.994	-1955.380	-33.614	1.69%	11.20%
5E+12	146	-1989.593	-1959.685	-29.908	1.50%	9.97%
1E+13	147	-1988.827	-1967.433	-21.394	1.08%	7.13%
1E+13	148	-1990.759	-1962.128	-28.631	1.44%	9.54%
1E+13	149	-1990.337	-1949.760	-40.577	2.04%	13.53%
1E+13	150	-1993.519	-1950.086	-43.433	2.18%	14.48%
1E+13	151	-1990.345	-1938.775	-51.570	2.59%	17.19%
Max		-1988.246	-1938.775	0.000	2.59%	17.19%
Average		-1991.950	-1974.240	-17.710	0.89%	5.90%
Min		-1995.735	-1995.735	-51.570	0.00%	0.00%
Std Dev		2.363	15.390	14.520	0.73%	4.84%



2600.1_load @ Vout=0V	
Test Site	
Tester	
Test Number	
Max Limit	-1800 mA
Min Limit	-2100 mA

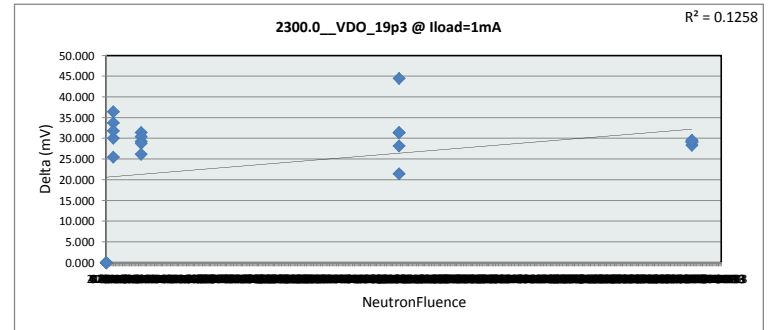
NeutronFluence	0	1.2E+11	6E+11	5E+12	1E+13
LL	-2100.000	-2100.000	-2100.000	-2100.000	-2100.000
Min	-1995.735	-1983.138	-1983.023	-1985.487	-1967.433
Average	-1993.511	-1975.836	-1979.970	-1968.246	-1953.636
Max	-1988.906	-1968.434	-1977.201	-1955.380	-1938.775
UL	-1800.000	-1800.000	-1800.000	-1800.000	-1800.000



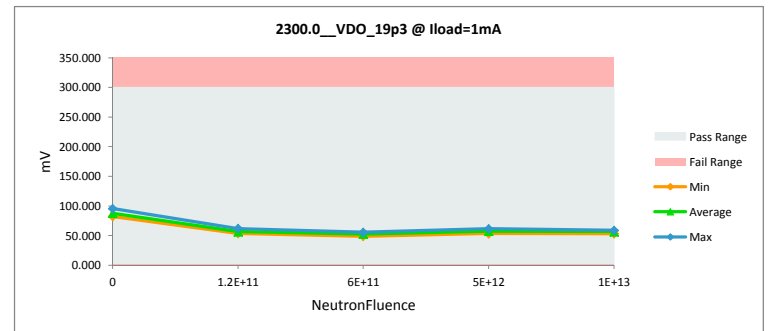
NDD Report
Device Name TPS7A4501

2300.0_VDO_19p3 @ Iload=1mA		
Test Site		
Tester		
Test Number		
Unit	mV	mV
Max Limit	300	300
Min Limit	1	1

NeutronFluence	Serial #	01152015_pre.txt	01112015_post.txt	Delta	Delta %	% of Limit Range
0	127	84.167	84.167	0.000	0.00%	0.00%
0	128	88.579	88.579	0.000	0.00%	0.00%
0	129	95.487	95.487	0.000	0.00%	0.00%
0	130	82.243	82.243	0.000	0.00%	0.00%
1.2E+11	131	91.860	58.106	33.754	36.75%	11.29%
1.2E+11	132	80.534	55.093	25.441	31.59%	8.51%
1.2E+11	133	85.024	54.981	30.043	35.33%	10.05%
1.2E+11	134	98.227	61.744	36.483	37.14%	12.20%
1.2E+11	135	85.470	53.694	31.776	37.18%	10.63%
6E+11	136	80.210	50.951	29.259	36.48%	9.79%
6E+11	137	86.967	55.527	31.440	36.15%	10.52%
6E+11	138	85.396	55.002	30.394	35.59%	10.17%
6E+11	139	78.831	52.686	26.145	33.17%	8.74%
6E+11	140	77.730	48.917	28.813	37.07%	9.64%
5E+12	141	89.238	57.799	31.439	35.23%	10.51%
0	142	88.332	88.332	0.000	0.00%	0.00%
5E+12	143	83.110	61.619	21.491	25.86%	7.19%
5E+12	144	97.958	53.509	44.449	45.38%	14.87%
5E+12	145	87.537	56.206	31.331	35.79%	10.48%
5E+12	146	86.796	58.648	28.148	32.43%	9.41%
1E+13	147	87.824	58.774	29.050	33.08%	9.72%
1E+13	148	87.798	58.202	29.596	33.71%	9.90%
1E+13	149	81.618	53.295	28.323	34.70%	9.47%
1E+13	150	83.539	54.318	29.221	34.98%	9.77%
1E+13	151	87.557	58.300	29.257	33.41%	9.78%
Max		98.227	95.487	44.449	45.38%	14.87%
Average		86.481	62.247	24.234	28.04%	8.11%
Min		77.730	48.917	0.000	0.00%	0.00%
Std Dev		5.332	13.511	13.009	14.66%	4.35%



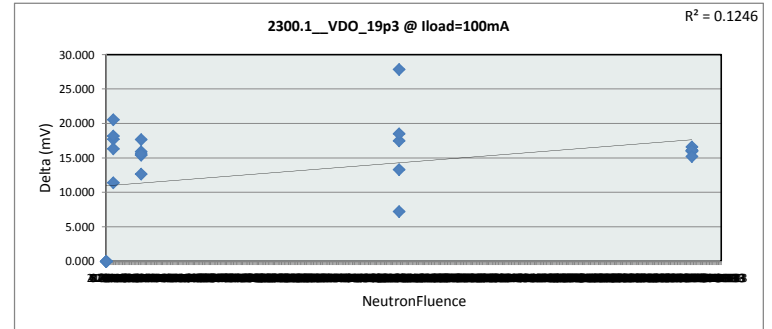
2300.0_VDO_19p3 @ Iload=1mA					
Test Site					
Tester					
Test Number					
Max Limit	300		mV		
Min Limit	1		mV		
NeutronFluence	0	1.2E+11	6E+11	5E+12	1E+13
LL	1.000	1.000	1.000	1.000	1.000
Min	82.243	53.694	48.917	53.509	53.295
Average	87.762	56.724	52.617	57.556	56.578
Max	95.487	61.744	55.527	61.619	58.774
UL	300.000	300.000	300.000	300.000	300.000



NDD Report
Device Name TPS7A4501

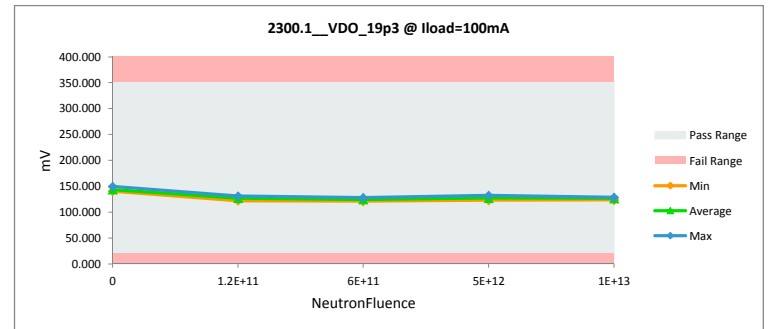
2300.1_VDO_19p3 @ Iload=100mA	
Test Site	
Tester	
Test Number	
Unit	mV mV
Max Limit	350 350
Min Limit	20 20

NeutronFluence	Serial #	01152015_pre.txt	01112015_post.txt	Delta	Delta %	% of Limit Range
0	127	140.717	140.717	0.000	0.00%	0.00%
0	128	143.568	143.568	0.000	0.00%	0.00%
0	129	149.714	149.714	0.000	0.00%	0.00%
0	130	140.783	140.783	0.000	0.00%	0.00%
1.2E+11	131	145.910	128.179	17.731	12.15%	5.37%
1.2E+11	132	140.411	128.991	11.420	8.13%	3.46%
1.2E+11	133	141.431	125.120	16.311	11.53%	4.94%
1.2E+11	134	151.703	131.128	20.575	13.56%	6.23%
1.2E+11	135	140.333	122.131	18.202	12.97%	5.52%
6E+11	136	137.193	121.276	15.917	11.60%	4.82%
6E+11	137	145.516	127.839	17.677	12.15%	5.36%
6E+11	138	141.963	126.560	15.403	10.85%	4.67%
6E+11	139	137.851	125.204	12.647	9.17%	3.83%
6E+11	140	137.459	121.849	15.610	11.36%	4.73%
5E+12	141	143.822	126.336	17.486	12.16%	5.30%
0	142	144.296	144.296	0.000	0.00%	0.00%
5E+12	143	139.380	132.159	7.221	5.18%	2.19%
5E+12	144	150.825	122.997	27.828	18.45%	8.43%
5E+12	145	144.663	126.172	18.491	12.78%	5.60%
5E+12	146	142.793	129.480	13.313	9.32%	4.03%
1E+13	147	143.754	127.677	16.077	11.18%	4.87%
1E+13	148	145.316	128.690	16.626	11.44%	5.04%
1E+13	149	140.529	124.553	15.976	11.37%	4.84%
1E+13	150	139.790	123.698	16.092	11.51%	4.88%
1E+13	151	143.375	128.178	15.197	10.60%	4.61%
Max		151.703	149.714	27.828	18.45%	8.43%
Average		142.924	129.892	13.032	9.10%	3.95%
Min		137.193	121.276	0.000	0.00%	0.00%
Std Dev		3.852	7.755	7.522	5.15%	2.28%



2300.1_VDO_19p3 @ Iload=100mA	
Test Site	
Tester	
Test Number	
Max Limit	350 mV
Min Limit	20 mV

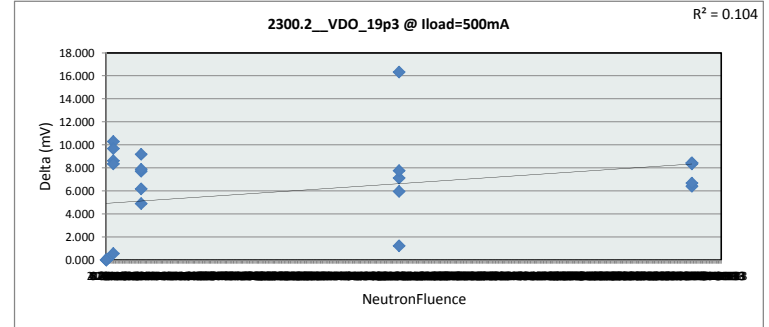
NeutronFluence	0	1.2E+11	6E+11	5E+12	1E+13
LL	20.000	20.000	20.000	20.000	20.000
Min	140.717	122.131	121.276	122.997	123.698
Average	143.816	127.110	124.546	127.429	126.559
Max	149.714	131.128	127.839	132.159	128.690
UL	350.000	350.000	350.000	350.000	350.000



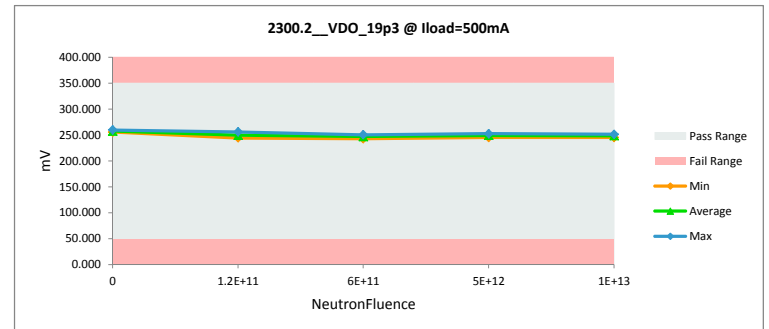
NDD Report
Device Name TPS7A4501

2300.2_VDO_19p3 @ Iload=500mA	
Test Site	
Tester	
Test Number	
Unit	mV mV
Max Limit	350 350
Min Limit	50 50

NeutronFluence	Serial #	01152015_pre.txt	01112015_post.txt	Delta	Delta %	% of Limit Range
0	127	255.453	255.453	0.000	0.00%	0.00%
0	128	256.365	256.365	0.000	0.00%	0.00%
0	129	259.457	259.457	0.000	0.00%	0.00%
0	130	257.114	257.114	0.000	0.00%	0.00%
1.2E+11	131	257.230	248.626	8.604	3.34%	2.87%
1.2E+11	132	256.328	255.787	0.541	0.21%	0.18%
1.2E+11	133	255.384	247.060	8.324	3.26%	2.77%
1.2E+11	134	260.644	250.361	10.283	3.95%	3.43%
1.2E+11	135	253.645	243.978	9.667	3.81%	3.22%
6E+11	136	250.144	242.442	7.702	3.08%	2.57%
6E+11	137	259.430	250.269	9.161	3.53%	3.05%
6E+11	138	254.866	249.991	4.875	1.91%	1.63%
6E+11	139	252.220	246.043	6.177	2.45%	2.06%
6E+11	140	253.263	245.390	7.873	3.11%	2.62%
5E+12	141	255.913	248.804	7.109	2.78%	2.37%
0	142	258.334	258.334	0.000	0.00%	0.00%
5E+12	143	253.501	252.284	1.217	0.48%	0.41%
5E+12	144	261.418	245.086	16.332	6.25%	5.44%
5E+12	145	257.154	249.409	7.745	3.01%	2.58%
5E+12	146	255.715	249.780	5.935	2.32%	1.98%
1E+13	147	256.918	250.519	6.399	2.49%	2.13%
1E+13	148	257.955	251.293	6.662	2.58%	2.22%
1E+13	149	254.731	246.308	8.423	3.31%	2.81%
1E+13	150	253.431	245.081	8.350	3.29%	2.78%
1E+13	151	256.909	248.484	8.425	3.28%	2.81%
Max		261.418	259.457	16.332	6.25%	5.44%
Average		256.141	250.149	5.992	2.34%	2.00%
Min		250.144	242.442	0.000	0.00%	0.00%
Std Dev		2.642	4.686	4.199	1.63%	1.40%



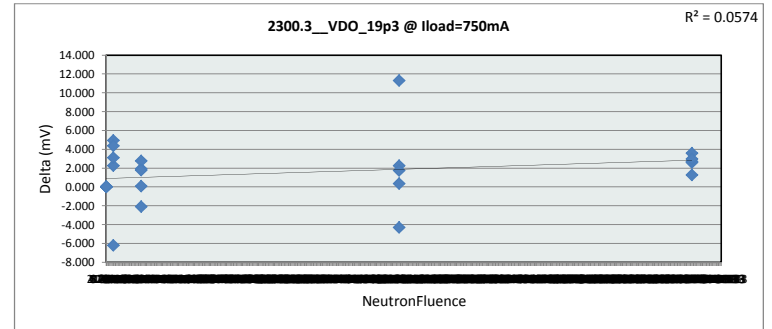
2300.2_VDO_19p3 @ Iload=500mA	
Test Site	
Tester	
Test Number	
Max Limit	350 mV
Min Limit	50 mV
NeutronFluence	0 1.2E+11 6E+11 5E+12 1E+13
LL	50.000 50.000 50.000 50.000 50.000
Min	255.453 243.978 242.442 245.086 245.081
Average	257.345 249.162 246.827 249.073 248.337
Max	259.457 255.787 250.269 252.284 251.293
UL	350.000 350.000 350.000 350.000 350.000



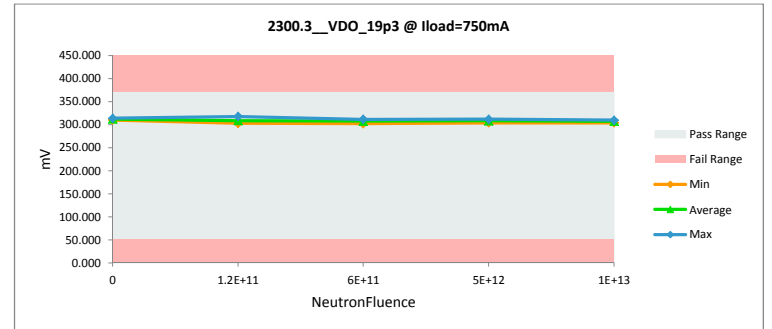
NDD Report
Device Name TPS7A4501

Test Site	2300.3_VDO_19p3 @ Iload=750	
Tester		
Test Number		
Unit	mV	mV
Max Limit	370	370
Min Limit	50	50

NeutronFluence	Serial #	01152015_pre.txt	01112015_post.txt	Delta	Delta %	% of Limit Range
0	127	309.973	309.973	0.000	0.00%	0.00%
0	128	310.502	310.502	0.000	0.00%	0.00%
0	129	313.231	313.231	0.000	0.00%	0.00%
0	130	312.879	312.879	0.000	0.00%	0.00%
1.2E+11	131	310.571	308.310	2.261	0.73%	0.71%
1.2E+11	132	311.506	317.708	-6.202	-1.99%	1.94%
1.2E+11	133	309.537	306.417	3.120	1.01%	0.97%
1.2E+11	134	313.546	308.605	4.941	1.58%	1.54%
1.2E+11	135	307.055	302.693	4.362	1.42%	1.36%
6E+11	136	303.811	301.900	1.911	0.63%	0.60%
6E+11	137	314.142	311.378	2.764	0.88%	0.86%
6E+11	138	308.832	310.909	-2.077	-0.67%	0.65%
6E+11	139	306.501	306.419	0.082	0.03%	0.03%
6E+11	140	308.185	306.408	1.777	0.58%	0.56%
5E+12	141	309.407	307.140	2.267	0.73%	0.71%
0	142	313.800	313.800	0.000	0.00%	0.00%
5E+12	143	307.392	311.705	-4.313	-1.40%	1.35%
5E+12	144	314.920	303.617	11.303	3.59%	3.53%
5E+12	145	311.063	309.307	1.756	0.56%	0.55%
5E+12	146	309.637	309.297	0.340	0.11%	0.11%
1E+13	147	310.815	309.543	1.272	0.41%	0.40%
1E+13	148	312.202	309.618	2.584	0.83%	0.81%
1E+13	149	308.723	306.013	2.710	0.88%	0.85%
1E+13	150	307.258	303.663	3.595	1.17%	1.12%
1E+13	151	310.812	307.847	2.965	0.95%	0.93%
Max		314.920	317.708	11.303	3.59%	3.53%
Average		310.252	308.755	1.497	0.48%	0.78%
Min		303.811	301.900	-6.202	-1.99%	0.00%
Std Dev		2.709	3.725	3.238	1.04%	0.78%



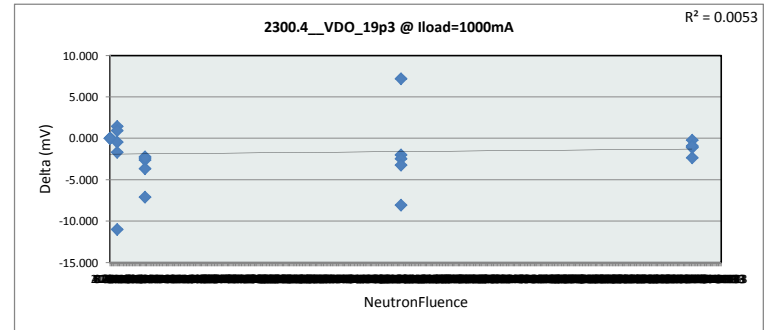
Test Site	2300.3_VDO_19p3 @ Iload=750				
Tester					
Test Number					
Max Limit	370		mV		
Min Limit	50		mV		
NeutronFluence	0	1.2E+11	6E+11	5E+12	1E+13
LL	50.000	50.000	50.000	50.000	50.000
Min	309.973	302.693	301.900	303.617	303.663
Average	312.077	308.747	307.403	308.213	307.337
Max	313.800	317.708	311.378	311.705	309.618
UL	370.000	370.000	370.000	370.000	370.000



NDD Report
Device Name TPS7A4501

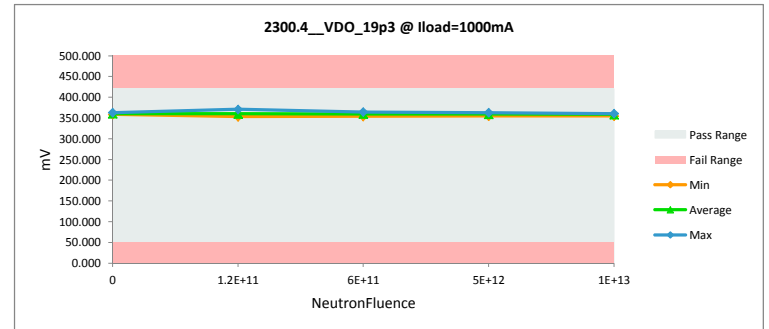
2300.4_VDO_19p3 @ Iload=1000mA		
Test Site		
Tester		
Test Number		
Unit	mV	mV
Max Limit	420	420
Min Limit	50	50

NeutronFluence	Serial #	01152015_pre.txt	01112015_post.txt	Delta	Delta %	% of Limit Range
0	127	358.487	358.487	0.000	0.00%	0.00%
0	128	358.537	358.537	0.000	0.00%	0.00%
0	129	360.810	360.810	0.000	0.00%	0.00%
0	130	361.943	361.943	0.000	0.00%	0.00%
1.2E+11	131	357.700	359.381	-1.681	-0.47%	0.45%
1.2E+11	132	359.896	370.881	-10.985	-3.05%	2.97%
1.2E+11	133	357.216	357.656	-0.440	-0.12%	0.12%
1.2E+11	134	360.537	359.093	1.444	0.40%	0.39%
1.2E+11	135	354.310	353.375	0.935	0.26%	0.25%
6E+11	136	351.270	353.892	-2.622	-0.75%	0.71%
6E+11	137	362.196	364.427	-2.231	-0.62%	0.60%
6E+11	138	356.114	363.220	-7.106	-2.00%	1.92%
6E+11	139	354.313	357.975	-3.662	-1.03%	0.99%
6E+11	140	356.329	358.711	-2.382	-0.67%	0.64%
5E+12	141	356.643	358.621	-1.978	-0.55%	0.53%
0	142	362.959	362.959	0.000	0.00%	0.00%
5E+12	143	354.700	362.738	-8.038	-2.27%	2.17%
5E+12	144	361.934	354.716	7.218	1.99%	1.95%
5E+12	145	358.303	360.743	-2.440	-0.68%	0.66%
5E+12	146	356.755	359.992	-3.237	-0.91%	0.87%
1E+13	147	358.173	360.529	-2.356	-0.66%	0.64%
1E+13	148	359.547	360.649	-1.102	-0.31%	0.30%
1E+13	149	356.228	357.269	-1.041	-0.29%	0.28%
1E+13	150	354.543	354.758	-0.215	-0.06%	0.06%
1E+13	151	358.335	359.263	-0.928	-0.26%	0.25%
Max		362.959	370.881	7.218	1.99%	2.97%
Average		357.911	359.625	-1.714	-0.48%	0.67%
Min		351.270	353.375	-10.985	-3.05%	0.00%
Std Dev		2.909	3.709	3.418	0.95%	0.78%



2300.4_VDO_19p3 @ Iload=1000mA		
Test Site		
Tester		
Test Number		
Max Limit	420	mV
Min Limit	50	mV

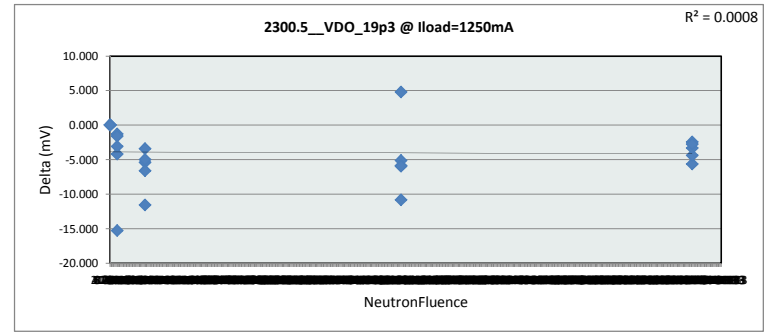
NeutronFluence	0	1.2E+11	6E+11	5E+12	1E+13
LL	50.000	50.000	50.000	50.000	50.000
Min	358.487	353.375	353.892	354.716	354.758
Average	360.547	360.077	359.645	359.362	358.494
Max	362.959	370.881	364.427	362.738	360.649
UL	420.000	420.000	420.000	420.000	420.000



NDD Report
Device Name TPS7A4501

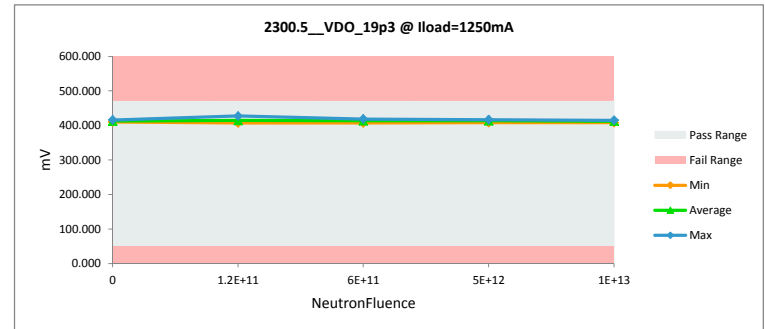
2300.5_VDO_19p3 @ Iload=1250mA	
Test Site	
Tester	
Test Number	
Unit	mV mV
Max Limit	470 470
Min Limit	50 50

NeutronFluence	Serial #	01152015_pre.txt	01112015_post.txt	Delta	Delta %	% of Limit Range
0	127	410.616	410.616	0.000	0.00%	0.00%
0	128	409.791	409.791	0.000	0.00%	0.00%
0	129	411.628	411.628	0.000	0.00%	0.00%
0	130	414.472	414.472	0.000	0.00%	0.00%
1.2E+11	131	408.544	412.757	-4.213	-1.03%	1.00%
1.2E+11	132	411.901	427.186	-15.285	-3.71%	3.64%
1.2E+11	133	408.370	411.478	-3.108	-0.76%	0.74%
1.2E+11	134	411.201	412.478	-1.277	-0.31%	0.30%
1.2E+11	135	405.524	407.118	-1.594	-0.39%	0.38%
6E+11	136	401.740	407.147	-5.407	-1.35%	1.29%
6E+11	137	413.507	416.925	-3.418	-0.83%	0.81%
6E+11	138	407.091	418.653	-11.562	-2.84%	2.75%
6E+11	139	405.410	412.047	-6.637	-1.64%	1.58%
6E+11	140	407.824	412.816	-4.992	-1.22%	1.19%
5E+12	141	407.642	412.764	-5.122	-1.26%	1.22%
0	142	415.550	415.550	0.000	0.00%	0.00%
5E+12	143	405.652	416.491	-10.839	-2.67%	2.58%
5E+12	144	412.840	408.056	4.784	1.16%	1.14%
5E+12	145	409.172	415.039	-5.867	-1.43%	1.40%
5E+12	146	407.958	413.932	-5.974	-1.46%	1.42%
1E+13	147	409.067	414.703	-5.636	-1.38%	1.34%
1E+13	148	410.301	414.711	-4.410	-1.07%	1.05%
1E+13	149	407.314	410.631	-3.317	-0.81%	0.79%
1E+13	150	405.405	407.847	-2.442	-0.60%	0.58%
1E+13	151	409.570	412.355	-2.785	-0.68%	0.66%
Max		415.550	427.186	4.784	1.16%	3.64%
Average		409.124	413.088	-3.964	-0.97%	1.03%
Min		401.740	407.118	-15.285	-3.71%	0.00%
Std Dev		3.203	4.221	4.226	1.03%	0.91%



2300.5_VDO_19p3 @ Iload=1250mA	
Test Site	
Tester	
Test Number	
Max Limit	470 mV
Min Limit	50 mV

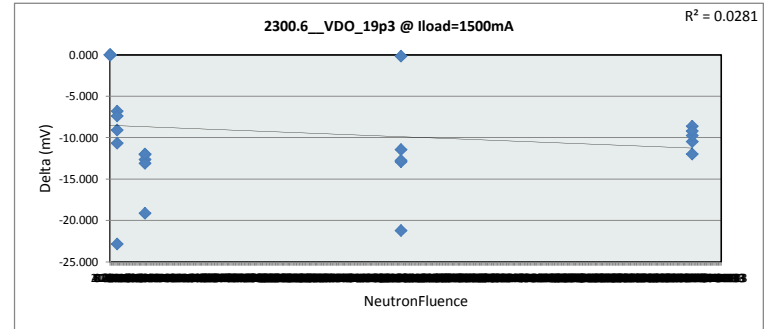
NeutronFluence	0	1.2E+11	6E+11	5E+12	1E+13
LL	50.000	50.000	50.000	50.000	50.000
Min	409.791	407.118	407.147	408.056	407.847
Average	412.411	414.203	413.518	413.256	412.049
Max	415.550	427.186	418.653	416.491	414.711
UL	470.000	470.000	470.000	470.000	470.000



NDD Report
Device Name TPS7A4501

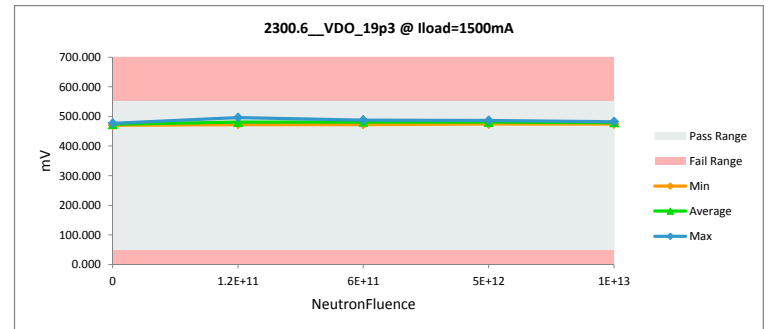
2300.6_VDO_19p3 @ Iload=1500mA	
Test Site	
Tester	
Test Number	
Unit	mV mV
Max Limit	550 550
Min Limit	50 50

NeutronFluence	Serial #	01152015_pre.txt	01112015_post.txt	Delta	Delta %	% of Limit Range
0	127	471.321	471.321	0.000	0.00%	0.00%
0	128	469.512	469.512	0.000	0.00%	0.00%
0	129	471.408	471.408	0.000	0.00%	0.00%
0	130	476.798	476.798	0.000	0.00%	0.00%
1.2E+11	131	468.296	478.958	-10.662	-2.28%	2.13%
1.2E+11	132	473.562	496.408	-22.846	-4.82%	4.57%
1.2E+11	133	468.750	477.862	-9.112	-1.94%	1.82%
1.2E+11	134	470.983	477.801	-6.818	-1.45%	1.36%
1.2E+11	135	464.982	472.374	-7.392	-1.59%	1.48%
6E+11	136	460.446	472.477	-12.031	-2.61%	2.41%
6E+11	137	474.917	487.579	-12.662	-2.67%	2.53%
6E+11	138	467.165	486.290	-19.125	-4.09%	3.83%
6E+11	139	465.463	478.575	-13.112	-2.82%	2.62%
6E+11	140	468.829	480.815	-11.986	-2.56%	2.40%
5E+12	141	467.112	478.582	-11.470	-2.46%	2.29%
0	142	476.879	476.879	0.000	0.00%	0.00%
5E+12	143	465.461	486.669	-21.208	-4.56%	4.24%
5E+12	144	473.795	473.950	-0.155	-0.03%	0.03%
5E+12	145	469.855	482.768	-12.913	-2.75%	2.58%
5E+12	146	468.486	481.263	-12.777	-2.73%	2.56%
1E+13	147	470.033	482.014	-11.981	-2.55%	2.40%
1E+13	148	470.881	481.353	-10.472	-2.22%	2.09%
1E+13	149	467.618	477.372	-9.754	-2.09%	1.95%
1E+13	150	465.160	473.810	-8.650	-1.86%	1.73%
1E+13	151	470.223	479.435	-9.212	-1.96%	1.84%
Max		476.879	496.408	0.000	0.00%	4.57%
Average		469.517	478.891	-9.374	-2.00%	1.87%
Min		460.446	469.512	-22.846	-4.82%	0.00%
Std Dev		3.851	6.077	6.548	1.40%	1.31%



2300.6_VDO_19p3 @ Iload=1500mA	
Test Site	
Tester	
Test Number	
Max Limit	550 mV
Min Limit	50 mV

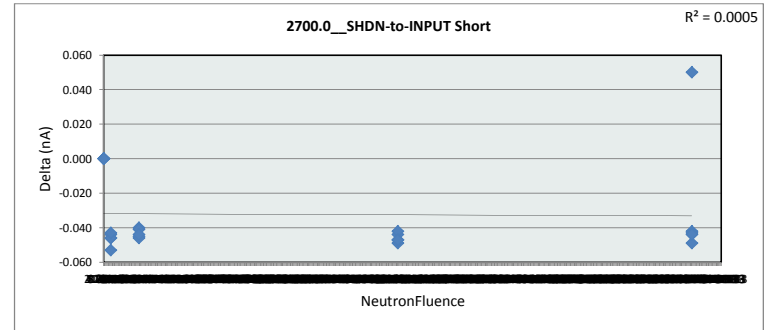
NeutronFluence	0	1.2E+11	6E+11	5E+12	1E+13
LL	50.000	50.000	50.000	50.000	50.000
Min	469.512	472.374	472.477	473.950	473.810
Average	473.184	480.681	481.147	480.646	478.797
Max	476.879	496.408	487.579	486.669	482.014
UL	550.000	550.000	550.000	550.000	550.000



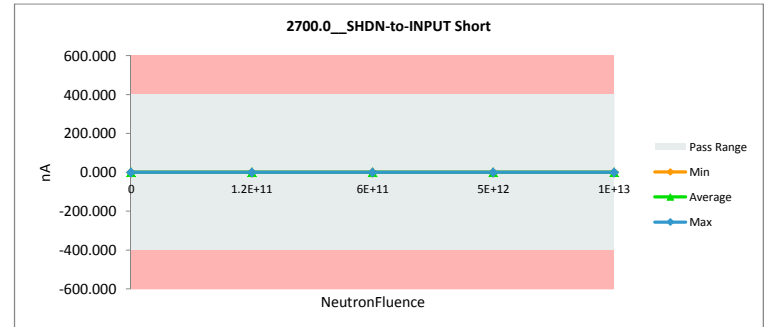
NDD Report
Device Name TPS7A4501

2700.0_SHDN-to-INPUT Short	
Test Site	
Tester	
Test Number	
Unit	nA nA
Max Limit	400 400
Min Limit	-400 -400

NeutronFluence	Serial #	01152015_pre.txt	01112015_post.txt	Delta	Delta %	% of Limit Range
0	127	-0.065	-0.065	0.000	0.00%	0.00%
0	128	-0.068	-0.068	0.000	0.00%	0.00%
0	129	-0.063	-0.063	0.000	0.00%	0.00%
0	130	-0.067	-0.067	0.000	0.00%	0.00%
1.2E+11	131	-0.062	-0.016	-0.046	74.19%	0.01%
1.2E+11	132	-0.067	-0.014	-0.053	79.10%	0.01%
1.2E+11	133	-0.060	-0.016	-0.044	73.33%	0.01%
1.2E+11	134	-0.062	-0.016	-0.046	74.19%	0.01%
1.2E+11	135	-0.059	-0.016	-0.043	72.88%	0.01%
6E+11	136	-0.056	-0.016	-0.040	71.43%	0.01%
6E+11	137	-0.057	-0.016	-0.041	71.93%	0.01%
6E+11	138	-0.061	-0.016	-0.045	73.77%	0.01%
6E+11	139	-0.063	-0.017	-0.046	73.02%	0.01%
6E+11	140	-0.059	-0.015	-0.044	74.58%	0.01%
5E+12	141	-0.065	-0.016	-0.049	75.38%	0.01%
0	142	-0.061	-0.061	0.000	0.00%	0.00%
5E+12	143	-0.060	-0.016	-0.044	73.33%	0.01%
5E+12	144	-0.058	-0.016	-0.042	72.41%	0.01%
5E+12	145	-0.062	-0.015	-0.047	75.81%	0.01%
5E+12	146	-0.062	-0.015	-0.047	75.81%	0.01%
1E+13	147	-0.058	-0.016	-0.042	72.41%	0.01%
1E+13	148	-0.065	-0.016	-0.049	75.38%	0.01%
1E+13	149	-0.059	-0.016	-0.043	72.88%	0.01%
1E+13	150	-0.060	-0.016	-0.044	73.33%	0.01%
1E+13	151	-0.060	-0.110	0.050	-83.33%	0.01%
Max		-0.056	-0.014	0.050	79.10%	0.01%
Average		-0.062	-0.029	-0.032	52.87%	0.00%
Min		-0.068	-0.110	-0.053	-83.33%	0.00%
Std Dev		0.003	0.026	0.025	41.35%	0.00%



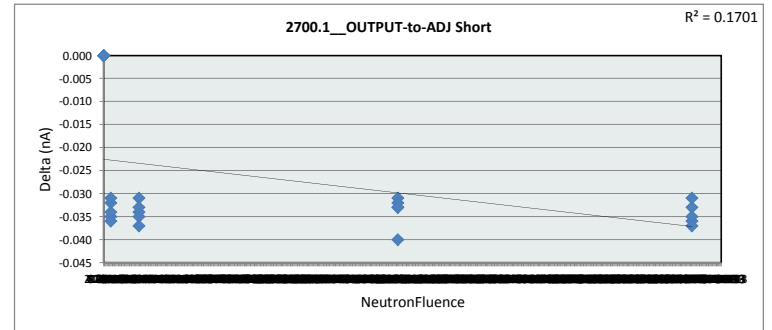
2700.0_SHDN-to-INPUT S					
Test Site					
Tester					
Test Number					
Max Limit	400 nA				
Min Limit	-400 nA				
NeutronFluence	0	1.2E+11	6E+11	5E+12	1E+13
LL	-400.000	-400.000	-400.000	-400.000	-400.000
Min	-0.068	-0.016	-0.017	-0.016	-0.110
Average	-0.065	-0.016	-0.016	-0.016	-0.035
Max	-0.061	-0.014	-0.015	-0.015	-0.016
UL	400.000	400.000	400.000	400.000	400.000



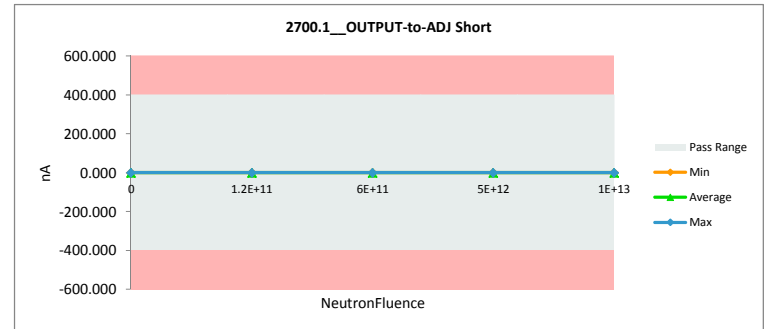
NDD Report
Device Name TPS7A4501

2700.1_OUTPUT-to-ADJ Short	
Test Site	
Tester	
Test Number	
Unit	nA nA
Max Limit	400 400
Min Limit	-400 -400

NeutronFluence	Serial #	01152015_pre.txt	01112015_post.txt	Delta	Delta %	% of Limit Range
0	127	-0.035	-0.035	0.000	0.00%	0.00%
0	128	-0.043	-0.043	0.000	0.00%	0.00%
0	129	-0.035	-0.035	0.000	0.00%	0.00%
0	130	-0.029	-0.029	0.000	0.00%	0.00%
1.2E+11	131	-0.033	-0.001	-0.032	96.97%	0.00%
1.2E+11	132	-0.035	0.000	-0.035	100.00%	0.00%
1.2E+11	133	-0.032	-0.001	-0.031	96.88%	0.00%
1.2E+11	134	-0.035	-0.001	-0.034	97.14%	0.00%
1.2E+11	135	-0.037	-0.001	-0.036	97.30%	0.00%
6E+11	136	-0.036	-0.001	-0.035	97.22%	0.00%
6E+11	137	-0.031	0.000	-0.031	100.00%	0.00%
6E+11	138	-0.037	0.000	-0.037	100.00%	0.00%
6E+11	139	-0.034	0.000	-0.034	100.00%	0.00%
6E+11	140	-0.033	0.000	-0.033	100.00%	0.00%
5E+12	141	-0.031	0.000	-0.031	100.00%	0.00%
0	142	-0.036	-0.036	0.000	0.00%	0.00%
5E+12	143	-0.033	0.000	-0.033	100.00%	0.00%
5E+12	144	-0.033	-0.001	-0.032	96.97%	0.00%
5E+12	145	-0.034	-0.001	-0.033	97.06%	0.00%
5E+12	146	-0.040	0.000	-0.040	100.00%	0.00%
1E+13	147	-0.037	-0.001	-0.036	97.30%	0.00%
1E+13	148	-0.034	-0.001	-0.033	97.06%	0.00%
1E+13	149	-0.036	-0.001	-0.035	97.22%	0.00%
1E+13	150	-0.032	-0.001	-0.031	96.88%	0.00%
1E+13	151	-0.038	-0.001	-0.037	97.37%	0.00%
Max		-0.029	0.000	0.000	100.00%	0.00%
Average		-0.035	-0.008	-0.027	78.61%	0.00%
Min		-0.043	-0.043	-0.040	0.00%	0.00%
Std Dev		0.003	0.014	0.014	40.14%	0.00%



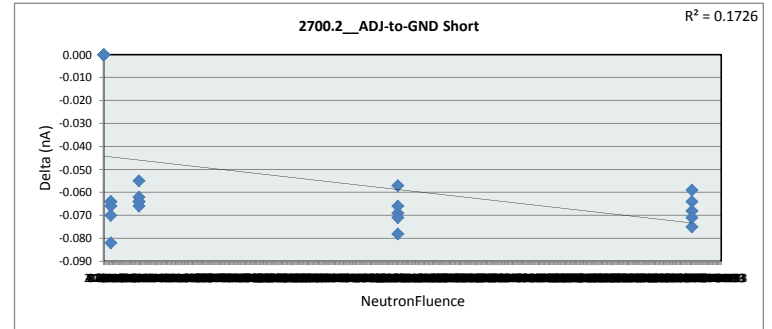
2700.1_OUTPUT-to-ADJ S					
Test Site					
Tester					
Test Number					
Max Limit	400 nA				
Min Limit	-400 nA				
NeutronFluence	0	1.2E+11	6E+11	5E+12	1E+13
LL	-400.000	-400.000	-400.000	-400.000	-400.000
Min	-0.043	-0.001	-0.001	-0.001	-0.001
Average	-0.036	-0.001	0.000	0.000	-0.001
Max	-0.029	0.000	0.000	0.000	-0.001
UL	400.000	400.000	400.000	400.000	400.000



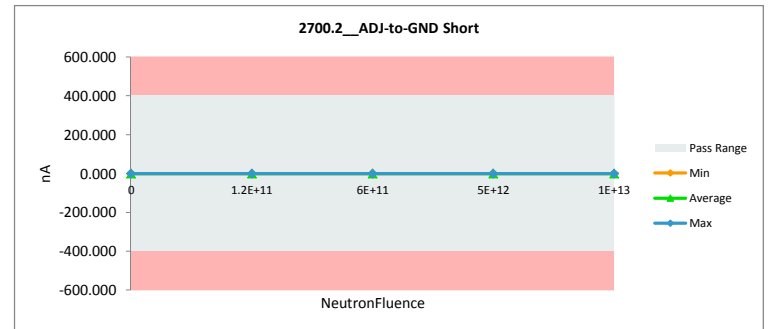
NDD Report
Device Name TPS7A4501

2700.2_ADJ-to-GND Short		
Test Site		
Tester		
Test Number		
Unit	nA	nA
Max Limit	400	400
Min Limit	-400	-400

NeutronFluence	Serial #	01152015_pre.txt	01112015_post.txt	Delta	Delta %	% of Limit Range
0	127	0.037	0.037	0.000	0.00%	0.00%
0	128	0.038	0.038	0.000	0.00%	0.00%
0	129	0.029	0.029	0.000	0.00%	0.00%
0	130	0.020	0.020	0.000	0.00%	0.00%
1.2E+11	131	0.039	0.103	-0.064	-164.10%	0.01%
1.2E+11	132	0.026	0.108	-0.082	-315.38%	0.01%
1.2E+11	133	0.039	0.103	-0.064	-164.10%	0.01%
1.2E+11	134	0.037	0.103	-0.066	-178.38%	0.01%
1.2E+11	135	0.032	0.102	-0.070	-218.75%	0.01%
6E+11	136	0.047	0.102	-0.055	-117.02%	0.01%
6E+11	137	0.042	0.104	-0.062	-147.62%	0.01%
6E+11	138	0.037	0.103	-0.066	-178.38%	0.01%
6E+11	139	0.039	0.103	-0.064	-164.10%	0.01%
6E+11	140	0.039	0.103	-0.064	-164.10%	0.01%
5E+12	141	0.035	0.104	-0.069	-197.14%	0.01%
0	142	0.037	0.037	0.000	0.00%	0.00%
5E+12	143	0.037	0.103	-0.066	-178.38%	0.01%
5E+12	144	0.025	0.103	-0.078	-312.00%	0.01%
5E+12	145	0.047	0.104	-0.057	-121.28%	0.01%
5E+12	146	0.033	0.104	-0.071	-215.15%	0.01%
1E+13	147	0.029	0.104	-0.075	-258.62%	0.01%
1E+13	148	0.039	0.103	-0.064	-164.10%	0.01%
1E+13	149	0.034	0.102	-0.068	-200.00%	0.01%
1E+13	150	0.031	0.102	-0.071	-229.03%	0.01%
1E+13	151	0.044	0.103	-0.059	-134.09%	0.01%
Max		0.047	0.108	0.000	0.00%	0.01%
Average		0.036	0.089	-0.053	-152.87%	0.01%
Min		0.020	0.020	-0.082	-315.38%	0.00%
Std Dev		0.007	0.029	0.028	92.02%	0.00%



2700.2_ADJ-to-GND Short					
Test Site					
Tester					
Test Number					
Max Limit	400	nA			
Min Limit	-400	nA			
NeutronFluence	0	1.2E+11	6E+11	5E+12	1E+13
LL	-400.000	-400.000	-400.000	-400.000	-400.000
Min	0.020	0.102	0.102	0.103	0.102
Average	0.032	0.104	0.103	0.104	0.103
Max	0.038	0.108	0.104	0.104	0.104
UL	400.000	400.000	400.000	400.000	400.000



IMPORTANT NOTICE AND DISCLAIMER

TI PROVIDES TECHNICAL AND RELIABILITY DATA (INCLUDING DATA SHEETS), DESIGN RESOURCES (INCLUDING REFERENCE DESIGNS), APPLICATION OR OTHER DESIGN ADVICE, WEB TOOLS, SAFETY INFORMATION, AND OTHER RESOURCES "AS IS" AND WITH ALL FAULTS, AND DISCLAIMS ALL WARRANTIES, EXPRESS AND IMPLIED, INCLUDING WITHOUT LIMITATION ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT OF THIRD PARTY INTELLECTUAL PROPERTY RIGHTS.

These resources are intended for skilled developers designing with TI products. You are solely responsible for (1) selecting the appropriate TI products for your application, (2) designing, validating and testing your application, and (3) ensuring your application meets applicable standards, and any other safety, security, regulatory or other requirements.

These resources are subject to change without notice. TI grants you permission to use these resources only for development of an application that uses the TI products described in the resource. Other reproduction and display of these resources is prohibited. No license is granted to any other TI intellectual property right or to any third party intellectual property right. TI disclaims responsibility for, and you will fully indemnify TI and its representatives against, any claims, damages, costs, losses, and liabilities arising out of your use of these resources.

TI's products are provided subject to [TI's Terms of Sale](#) or other applicable terms available either on ti.com or provided in conjunction with such TI products. TI's provision of these resources does not expand or otherwise alter TI's applicable warranties or warranty disclaimers for TI products.

TI objects to and rejects any additional or different terms you may have proposed.

Mailing Address: Texas Instruments, Post Office Box 655303, Dallas, Texas 75265
Copyright © 2022, Texas Instruments Incorporated